

THE MONIST

THE TWO ACCOUNTS OF HAGAR.

(Genesis xvi. and xxi., 8-21.)

SPECIMEN OF AN HISTORICO-THEOLOGICAL INTERPRETATION OF GENESIS.¹

OF all the books of the Old Testament probably Genesis interests both theologian and layman most. And indeed, for certain phases of our general theological and religious attitude it is of the greatest importance how we regard the individual narratives of Genesis, stories that have been dear to us from earliest youth up. Moreover, Old Testament theology has devoted a great, indeed an immense, amount of learning and intellect to the interpretation of Genesis. In the present century Old Testament science has been occupied especially with tracing up the sources from which by general consent Genesis is composed; and though the combination of the sources of this book is far too complicated ever to warrant the expectation of a final and complete solution of all the problems involved, yet the result has been such that we of the present day may point to it with grateful pride in our predecessors in science. Especial respect and gratitude is due to the Old Testament specialist Wellhausen, who taught us how to judge correctly the relative age and the character of the sources.

¹ Translated from the author's MS. by W. H. Carruth, of the University of Kansas.

And yet, if we consider the commentaries on Genesis, and ask them what, after all, has been the outcome for the real purpose of all work upon Genesis, to wit, the living, historico-theological understanding of these narratives, we cannot give a really satisfactory answer, despite the best of will toward what has been thus far accomplished: while dealing with all the preliminary questions the really vital matter has been neglected, the chief emphasis of investigation has been laid upon literary criticism and the combination of the sources. And this has been the case not only with Genesis but to a large extent with the rest of the Old Testament, and not with the Old Testament alone, but also frequently with the New Testament. Now, all literary criticism is in the nature of preliminary,—a truth that should never have been allowed to grow dim. Ultimately the important thing is not to know by whom and when a book was written, and what its sources were, but the real question for scholarship should ever be: How is this book to be understood? And it is very plain that theological exegesis has fallen short in this respect. Exegesis is considered tedious, and often, indeed, with justice. Why? Because it is occupied too exclusively with preliminary questions, with matters of text criticism, grammar, archæology, and lexicography, with introductory discussions, and, especially in the case of the New Testament, with the logical connexion. All this is well and good provided it remains merely preliminary and keeps within proper limits. But it is not the vital matter; the vital matter is to get a living conception of the living writer who here speaks to us, to come near to him in spirit, to put ourselves in his place when he rejoices and when he grieves, when he pines and sighs, and when he exults in his hymn of thanksgiving. The living understanding of the book, that is true exegesis.—It may be said in reply that we should not blame the past too much for spending so much time over preliminary matters and failing so largely to reach the matter of prime importance, since these very preliminaries had to be disposed of in advance. I am quite willing to accept this explanation, and only ask consent to my proposition that it is now time to begin energetically with real exegesis. Now what appears to be the object of

such exegesis in Genesis? This I propose to show by an example in what follows.¹

HAGAR'S FLIGHT; GENESIS XVI.

1. *Sarah, Abraham's wife, bare him no children; and she had an handmaid, an Egyptian, whose name was Hagar.*—The narrative makes an entirely new start, assuming only one thing, that there is a man by the name of Abraham; everything else is told in the story. We infer from this that the narrative once existed independently. In oral tradition every story is told as complete in itself; the connexion in which we find the stories at present was supplied afterwards.—The slave, Hagar, is the property of Sarah, not of Abraham. According to Israelitish custom parents could give to a young wife a slave as dowry, who was thus her personal property, and not, like the other maid-servants, at the disposal of her husband. The slave is a foreigner, which was probably a very common thing in an Israelitish family. In this particular case she was an Egyptian and named Hagar. These items ought to mean something, just what, we are to learn in the following.

2. *Now Sarah said unto Abraham: Thou knowest that Jahweh has denied me children; go in unto my handmaid; it may be that I shall obtain a son by her.*—The great mysteries of generation, conception and birth are derived in all antiquity from the divinity, in polytheistic religions usually from a goddess. In Israel this, along with many other matters, had been transferred to Jahweh who thus receives many and sometimes quite varied predicates.—An old Israelitish legal custom is here referred to, according to which the wife, if barren, may offer another woman as substitute and adopt the latter's children. Of course, it costs Sarai some struggle to sur-

¹ For further exposition of these stories the reader is referred to my *Commentary on Genesis*, soon to appear from the press of Ruprecht and Vandenhoeck in Göttingen. The author would like to say at the same time that this Commentary which is intended primarily for the Old Testament scholar and the student of theology, will appeal also to the interest of the lay reader who is familiar with history. It is hoped that friends of the Bible who get hold of this Commentary will recognise the devoted love with which the author has labored for many years upon Genesis.

render to her husband the slave who is her personal property, but she conquers herself in the hope of thus obtaining children. Childlessness is a misfortune and a disgrace, while motherhood brings honor and dominion in the house. The wish of the slave is not consulted in the surrender; it is a great honor for her to have intercourse with her master.

4. *And Abraham obeyed Sarah, and he went in unto Hagar, and she conceived. But when she saw that she was with child, she despised her mistress.* The slave woman, shown too much honor, grows arrogant. And the narrator makes plain that he strongly disapproves of such action on the part of the slave, emphasising the words: she despised her mistress. This must never be, for the slave must honor his master.

5. *And Sarah said unto Abraham: The wrong that I suffer be upon thee! I myself gave my handmaid into thine arms, and now that she sees that she is with child, she despises me. Jahweh judge between me and thee.* Sarah is indignant, so indignant that she even invokes the righteous judgment of Jahweh against her husband, for she feels that she has deserved reward and not insult from Abraham.

6. *Then said Abraham to Sarah: Behold, thy maid is in thy hand; do to her whatever seemeth to thee well. So Sarah dealt hardly with her; but she fled from before her.* Abraham, always tractable, renounces his claim to his concubine for the sake of peace in the family. The phrase "she is in thy hand" indicates a legal act, a cession; accordingly Hagar is now once more Sarah's slave. Before this Sarah could not help enduring contempt; now she turns the tables and shows Hagar who is mistress. What she did to her, as well as what Hagar had done before to offend her mistress, the narrator fails to tell; primitive narrative is very sparing of such details. It is not to be supposed that she treated her gently, for an Israelitish slave was used to sound drubbings.—The few touches make the three personages perfectly clear: Abraham is tractable and yields to his wife; at her request he takes Hagar as a concubine, and again at her bidding he dismisses her. Sarah is the impulsive woman, proudly conscious of her position as wife, in passion cruel and very subjective: in order to obtain children she gave

away Hagar, and yet she regards this very act as deserving of recognition from her husband. And so, in her passionate indignation at the injustice done her, she sets herself up as unselfish before Abraham,—which is psychologically very true to nature. The Israelitish husband probably sighs in secret over his irritable wife. Finally the slave, whose fluctuant fortunes entertain and move the hearer; first a slave, then her master's concubine and mother of the heir, and as such impudent toward her childless mistress; then severely abused and offended in her maternal pride. These three: husband, wife, and maid, are clearly Israelitish types; that they act just as they do, seems to the naïve legend quite a matter of course, for this is the fashion of Israel.

From this point on, Hagar is the leading character. "But she fled from before her." In the construction of the narrative this sentence is the climax of all that has preceded (the object of which is to explain this flight), and the preliminary for all that is to follow. What are we to regard as the motive of Hagar's flight? The narrator informs us that Hagar was with child, and that she dared to flee into the wilderness, the wilderness where deprivations, violence and murder threatened her. It was, then, an act of desperation and of defiance: better all the dangers of the wilderness than the insults in the tent of Sarah! Thus we have a complete picture of Hagar: when it was well with her she treated her mistress with insolence, when she is humbled she runs away in defiance. At the same time we are not to lose all sympathy with the unruly Hagar; for afterwards the legend tells us that the divinity himself took care of her. The judgment of the god is of course the judgment of the narrator himself, who takes pleasure in the unbending will of the stubborn woman.

7. *Then she met an angel of Jahweh¹ by the fountain in the wilderness (by the fountain in the way to Shur).* In connecting the story we have to consider that Hagar has come to the fountain to drink; just as any travellers and Bedouins come to the fountain. It seems

¹ Thus we should read.

that Hagar is acquainted with the desert. "The fountain" is a definite fountain, the location and name of which are given at the close of the story. The phrase "by the fountain in the way to Shur" anticipates this description, and is a proper addition as far as situation goes. The fountain is on the road from Canaan to Egypt, which suits the circumstances perfectly: the fugitive Hagar is fleeing to her old home in Egypt. The old narratives always fit closely into the surroundings in which they take place; they do not originate in the study, are not learned accounts, but popular tales, told in the very places of which they treat. There Hagar meets the divinity, who bears the name of "Jahweh's angel."

Now we are struck by the fact that Hagar afterwards believes that she has seen Jahweh himself: "And she called the name of the Jahweh that spake unto her *El roi*" אֱלֹהֵי רֹאִי. This strange confusion of Jahweh with the angel of Jahweh is not rare elsewhere in the old narratives, and has been the occasion of curious conjectures and still more curious attempts at explanation on the part of modern investigators. In all cases where the given statement of facts in an otherwise reasonable tradition seems to be absurd the explanation is to be found in the existence of a history in which a peculiar distortion has made apparent nonsense out of what was originally intelligible and simple. Older versions introduced Jahweh himself in such cases; later editors and copyists were offended by the notion of Jahweh's being thus too intimately involved with the world, and preferred in these passages to speak of the angel of Jahweh, that is, an inferior divine being. But this modification is not carried out consistently; in some places Jahweh's name remains. And thus has come about the apparent absurdity that an angel of Jahweh appears, but that Hagar declares that she saw Jahweh. This substitution for the god of an inferior divine being is a process which we may find frequently in the history of religion elsewhere.—But we can go a step further. Later Ishmael receives his name from the fact that *God heareth*; but this name is not Shemaja, "Jahweh heareth," but Ishmael, "El heareth." From this we conjecture that the oldest version of the story did not contain the name of Jahweh at all, but spoke of an "El," that is, god. The

correctness of this inference is shown by the word of Hagar: she called the name of the Jahweh that spake unto her, "El roi."

So "El roi" was doubtless the original name of the god of this narrative. Accordingly we perceive in the legend three stages of religious development. Originally the god was "él roi" אֱלֹהֵי רֹאִי, then Jahweh was introduced and "él roi" became an epithet of Jahweh in this place; finally the angel of Jahweh took the place of Jahweh.

Furthermore we are able to say something about the nature of this "él roi" אֱלֹהֵי רֹאִי. This god appears at the fountain, he is a fountain-deity, and indeed the deity of a certain fountain, the fountain "lahai roi" לַחַי רֹאִי. It is not a matter of accident that the name of the divinity, "él roi," and that of his fountain, "beer lahai roi" בְּיַר לַחַי רֹאִי, are found together; this god is the deity of this fountain. And so we thus obtain a glance into an ancient religion, in which exists a belief in local deities, specifically in fountain deities. What we know of the pre-Israelitish religion of Canaan agrees entirely with these inferences. The pre-Israelitish religion of Canaan worshipped a great number of such local deities, the "bealim" and in Canaan, as well as in other lands, fountains were frequently held sacred; in the earliest times people saw a reflexion of the divinity in the living, ever-gushing, life-giving water. When Israel occupied Canaan it adopted also a portion of the Canaanitish deities, religious ceremonies and legends, and to some extent identified these deities with its own Jahweh. And thus here the god of the fountain, *el roi* is regarded as equivalent to Jahweh.

In the same way the epithet of Jahweh at Bethel is *el Bethel*, at Beersheba, *el olam*, at Jerusalem, *el eljon*; all of these names were originally the names of the local deities of these places, and were only transferred later by Israel to Jahweh.

But now it is very important to note that the relation between the fountain and the god, which must have been very close once, has become very loose in the present form of the story; the god is no longer represented as coming forth from the fountain or vanishing in it. This feature is common in the legends of Genesis: the god and the place of his worship are always rather loosely connected. Israel identified Jahweh with the local deities to a certain

extent, but did not think of Jahweh as so closely connected with the locality. So the history of the Hagar stories is a small section of the great process of the adoption by Israel of Canaanitish worship.

The god appeared to Hagar at the fountain and spoke with her. Such appearances and conversations on the part of the god are nothing rare in ancient legends. And incidentally it is very common for the god to appear unrecognised. It is characteristic of divinity that it works in secret; it is too awful to appear openly; man would needs die with terror if he recognised its true nature. Accordingly the legends like to tell how the god lifts the veil gently and gradually until the human being has recognised him; but at the moment when this occurs the god vanishes. Thus it is here.

8. *He said: Hagar, Sarah's maid, whence comest thou? whither goest thou? And she said: I must flee from before my mistress Sarah.* It is assumed in this conversation that Hagar did not at first recognise the god; in her eyes he is merely "a man." The man speaks to her, not she to him; that she would not dare to do because he looks so "fearful." But his words are wonderful. She does not know him, but he knows her and calls her by name. Hagar cannot fail to wonder whether this is perhaps a man of God. Then he continues: "Whence comest thou? Whither goest thou?" a question of surprise and also of interest: why are you, a woman, here in the wilderness? But Hagar answers as though through her shut teeth; no whimpering and complaining, but only the fact that she is fleeing.

11. *And the angel of Jahweh said to her: Behold, thou art with child.* Hagar's pregnancy—such is the assumption in this remark—has thus far been a secret; and the man knows even this most intimate secret! Accordingly she is inclined to believe him when he continues: *Thou shalt bear a son*, and then prescribes his name: *And thou shalt call his name Ishmael* ("god heareth"); *for Jahweh hath heard how thou hast been mistreated.* The legends are fond of telling how an oracle is pronounced regarding an unborn child; what the man afterwards became, the divinity prophesied to his mother before his birth: and so his later fortunes are not a matter of chance, but divine destiny. And even his name is not left to the

whim of the parents, but is fixed by the command of God. And God imparted also even the significance of the name. The ancient Hebrew people devoted much attention to the significance of names; almost every old legend contains such interpretations, which are often ingenious and full of meaning.—But the boy is to be called Ishmael because God has heard “thy mistreatment.” The original uses the same expression as before in “she dealt hardly with her.” God has heard of this mistreatment, heard even now as he hears Hagar speak. But to Hagar these words are a new puzzle; whence does this remarkable man know that God has heard of this mistreatment? And now she even hears from his mouth a prophecy regarding the destiny of her son:

12. *He shall be as a wild ass among men, his hand against every man, and every man's hand against him, and he shall sit upon the nose¹ of all his brethren.* These words are intended to comfort Hagar and encourage her to endure all her hardships here, for a reward is in store for her trouble.—The legend details the destiny of Ishmael to become a Bedouin with unmistakable satisfaction. It compares the Bedouin with the animal that shares the desert with him. The wild ass is untamable and fond of freedom; he laughs at cities and the driver; but indeed his food is scanty: a splendid picture of the nomad. And further: Ishmael's life is a constant warfare, and he is every man's foe: a lot enjoyed by men of heroic type, but, on the other hand, full of dangers. “And he sits upon the nose of all his brethren,” a situation more agreeable to him than to the brethren whose cattle he robs and whose fields he plunders. This vigorous description of the destiny of Ishmael may serve as a warning to the modern teacher not to get too mild a conception of the tone of the story. For the legend thinks, rather, that this untamable Ishmael is a worthy son of his bold and defiant mother, who also refused to bend her neck under the yoke, but spurned a life of security because it was also a life of humiliation. And such as she is as she stands at this moment before the god, defiant and at odds

¹ This extraordinary phrase is not suggested in any of the variants of the English Revised Version. Yet Professor Gunkel seems not to use it whimsically; he comments upon it later as though it must be taken literally.

with the world, so her son is to become, he also, unruly, freedom-loving and the foe of all the world. Now comes the conclusion. As is customary in old legends, the place, and in this case the god also, receives a name.

13. *She called the name of the Jahweh that spake unto her: Thou art "el roi"; for she said, Verily here have I seen the end (?)*¹ . . . The explanation of the name has become unclear in the text; from the sense of the connexion we should expect perhaps: "the end of my distress." The narrator of the legend reflects upon the meaning of the name *el roi*, the original and precise meaning of which is scarcely known to him, and interprets it in his own fashion. The name of the fountain also is explained.

14. *Therefore the fountain is called "beer lahai roi"; it lies, as is well known, between Kadesh and Bered.*—The conclusion of the narrative is lacking. We expect to be told further: how Hagar remained by this fountain; how she bore Ishmael there and gave him the name; how Ishmael grew up and became a tribe which had its seat by this fountain and this "él" for its god. Why this conclusion is lacking will be shown hereafter.

THE ORIGINAL MEANING OF THE LEGEND.

The legend deals with Ishmael. This name appears elsewhere in ancient legends and histories as the name of a Bedouin race. Plainly the Ishmael of whom our story tells is according to the legend the ancestor of the race that is said to bear his name. This is made perfectly certain by xxi. 18, according to which the boy Ishmael became a great race. The same thing is true of many personages in Genesis, especially, for instance, of Jacob and Esau, of Judah, Joseph and the other sons of Jacob, of Moab and Ammon, of Shem, Ham and Japhet, and many others. All these in history and in reality are races and tribes; in legend and poetry they are regarded as individuals, ancestors of the races which they personify. We need not raise the question here how extensively this view is to be applied to the personages of Genesis; I am showing here only

¹ The Eng. Revised Version has here no variant at all, but something altogether different: "Have I even here looked after him that seeth me?"

that the legend of Ishmael, if I understand it rightly, requires this interpretation. When this legend describes Ishmael's love of freedom and his quarrelsomeness, it means by this not only that there lived once a man named Ishmael who had this character, but it desires at the same time to characterise thereby the habits of his descendants, the Ishmaelites. When it gives the name of the fountain beside which Ishmael's birth was prophesied, this is no fiction, but that fountain, we must conclude, was the chief seat and sanctuary of the tribe of the Ishmaelites. Likewise when the legend reports the name of the god who appeared to Ishmael's mother, it means that this god, "él roi," is the tribal god of Ishmael.

Finally, the name of the mother, Hagar, is no invention. There must have been a primitive tribe named Hagar, from which the tribe of Ishmael was derived. The mother of Ishmael is a slave; this feature also has its significance. Those who tell one another this story, and who derive their origin from Isaac, the legitimate son, insist that they are nobler and more legitimate than their brother Ishmael. Furthermore, Hagar is an Egyptian, and Ishmael is therefore not pure stock, but only a half-breed. Such mixtures of Bedouin tribes and fugitive Egyptians are proven on historical evidence.¹ Ishmael is the older race, the first-born; this feature also is confirmed by the facts; when Israel came upon the stage of history Ishmael was already forgotten. And thus, if we but understand how to read these ethnographic legends, we can derive from them much information which is sometimes of great historical value. And this information is often the more valuable because these legends reach back into such primitive times, times from which we have no historic reports. Thus, of this race of Ishmael, with its center at Beer lehi roi, באר להי ראי, we have no other historical information. Moreover, it needs no argument to prove that these legends themselves become much more vivid when we understand their primitive meaning.

¹ Professor H. Winckler at Berlin says that the word מצריים is not related with מצרים Egypt, but with מצר, a name of a Bedouin tribe in the south of Palestine; a hypothesis which I cannot but think very probable. Hagar is according to the old account at home in the wilderness.

Many of the legends of Genesis aim to answer questions, and we fail to understand them if we do not recognise this purpose. Thus the legend we are considering asks the questions: Whence does Ishmael get its name? How does it come to have this location, this reputation, and this god? The need of furnishing answers to these questions led to our legend, or at least gave it its character. That is, our legend treats the origin of the tribe of Ishmael. The chief question is this: How does it come that Ishmael, our elder brother, has become a Bedouin? He is surely Abraham's son, conceived in Abraham's house, and yet a child of the desert, born beside a fountain in the wilderness; how can this be? The legend answers: When his mother had conceived him she became a fugitive, and thus he was born in the wilderness.

Age of the Legend.—Our legend must be very old, since it knows so much of this Ishmael that we can find in no historical account. Moreover, the characters of the personages are quite primitive. We can distinguish in the legends of Genesis two types, an older, in which men are drawn as they are, from life, and a later, which describes religious ideals. Very clearly the present legend belongs to the naïve older type. The conception of divinity is primitive also: the god sides with the defiant Hagar.—A great number of the legends of Genesis are not of Israelitish origin; many were simply adopted and amalgamated by Israel. Such may from the beginning be presumed to be the case with the legend of Ishmael. Just as, for instance, the Kyffhäuser legend¹ has, as a matter of course, its home at Mount Kyffhäuser, so it is natural that the tribal legend of Ishmael should have been told originally in Ishmael, and have had its home at Beer lahai roi. This would be borne out by a number of features, especially the vigorous description of the Bedouin life. Of course, the Ishmaelites must have told the story somewhat differently; they would not have made their ancestor the son of a fugitive slave. In our version we have the story as it was told in accordance with Israelitish tradition.

¹ According to a familiar German legend Emperor Frederick Barbarossa sits at a marble table within the Kyffhäuser, a mountain in Thuringia.

Style and Preservation of the Legend.—The legend is a remarkable model of the oldest narrative style. The first portion of the story, especially, is distinguished for the variety and truthfulness of its pictures. At the same time the legend is distinguished for strict connectedness of action and especially for its admirable condensation. The narrator achieves wonders in his omission of everything not absolutely essential; with great energy he holds to the main thread of the action. Such admirable art can only be the product of a long artistic tradition; we cannot but assume that it was cultivated in Israel by a class of professional *raconteurs*. Ancient legends usually show their great antiquity by the omission or veiling of some of their elements which had become offensive to later times. Thus it is here. The legend has forgotten that the god was the local god of the fountain, and the fountain really a sanctuary. How and whence the god came, where and when he disappeared, and when Hagar recognised him, all this the legend omits to say. There results a peculiar intellectual chiaroscuro which is characteristic of the ancient legends.

THE EXPULSION OF ISHMAEL, XXI, 8-21.

8. *And Abraham made a great feast on the day that Isaac was weaned.* 9. *And Sarah saw the son of Hagar the Egyptian, which she had borne unto Abraham, playing with her son Isaac.*¹ 10. *Wherefore she said unto Abraham, Cast out this bondwoman and her son; for the son of this bondwoman shall not be heir with my son, even with Isaac.* With clever and natural touches the legend indicates the motives for the expulsion of Ishmael. At the bottom of it was Sarah's jealous love for her son; for maternal love may become most terrible cruelty if any one tries to harm the beloved child. To give us a vivid picture of this the legend takes us to the day of the weaning of Isaac. This is the day on which, after the dangerous years of infancy—for the weaning occurred in about the third year,—the mother rejoices in her darling and regards it with especial tenderness. On this day Sarah happens to notice Ishmael playing with her child. This element of playing, *מצחק* (*mesaheq*) is derived

¹ Thus the Septuagint.

from the name Isaac יִשְׁחָק (*jishaq*), for the legends are fond of such ingenious plays on the names of persons and places.—The thoughts of Sarah as she sees the children playing are not given, in accordance with the custom of ancient narrative method; we have to guess them from the context. The mother is thinking—what else should she do on such a day as this?—of the future of her child, and already planning for it—for mother-love has far-seeing eyes. And so when she sees the two children playing together it occurs to her that they will divide the inheritance when they are men. And so she demands of Abraham that he cast out Hagar and his own son. The master has the right to dismiss his slave and expel his children entirely in accordance with his personal whim. It is to be noted that Hagar has in this case a different position in the house from that of the former account. There she was Sarah's property; but here she belongs to Abraham, and is at the same time his concubine; in this account she has nothing whatever to do with Sarah.

The older account went on to tell at this point how Abraham, being tractable, obeyed his wife; with heavy heart, indeed, though not on account of the slave—for slaves are plentiful—but on account of his son whom he is to cast out among strangers. But we may infer that she pursued him with her remarks and worried him so that his breath grew short as with one dying. The oldest account, intimate with human nature, probably regarded this yielding on Abraham's part as quite intelligible; the later version, which wished to see in Abraham a moral ideal, took offence at his casting out his own child. Accordingly a later hand has interpolated here the following: 11. *And the words were very grievous in Abraham's sight, on account of his son.* 12. *But God said unto Abraham: Let it not be grievous in thy sight because of the lad and because of thy bondwoman. Hearken unto Sarah in all that she saith unto thee, for in Isaac only shall thy seed be called.* That is, the descendants of Ishmael shall forget that they are derived from Abraham; so that he nevertheless will become no real son. And the Lord further comforts Abraham as to Ishmael's fate: 13. *But also of the son of the bondwoman will I make a nation, because he is thy seed.* That

these words are not a part of the original narrative is evident for many reasons, especially the following : If the ancient legend had known anything of this command, it would have mentioned it at the beginning of the story and have built up the whole story on this alone (as in the story of the sacrifice of Isaac). For a command from God is for the pious an adequate motive and permits no other subordinate motive. On the other hand, when the ancient legend shows such care to depict the jealousy of Sarah, it does so with the intention of explaining from this and this alone the expulsion of Ishmael. If in accordance with this we omit the command, the story gains in beauty and consistency of form and at the same time in antiquity and force of substance.

Thus far the occurrences in Abraham's tent. The legend now goes on to tell of the fortunes of Hagar and Ishmael. 14. *And Abraham rose up early in the morning, and took bread and a leather bottle of water and gave it to Hagar, and laid the boy on her shoulder,¹ and sent her away.* With deep sympathy the legend now tells of Hagar's expulsion and distress. A bottle of water and a loaf is all that she receives for the journey; how will she fare when this little supply is exhausted? Will she find her way in the pathless land? *And she departed and wandered in the wilderness of Beer-sheba.* So Abraham's home is to be thought of as not far from Beer-sheba. 15. *Now when the water in the leather bottle was spent she cast the boy under one of the shrubs,* 16 *and went and sat down over against him, as it were a bow-shot; for she said: let me not look upon the death of the child.* Now mother and child get into the most terrible mortal danger: the way is lost, the water is out; all that is left is to die. The story is evidently nearing its crisis, and on this account becomes unusually detailed: the situation is described closely and an exception is even made to the general rule against reporting thoughts directly. In her despair she cast the boy, whom she had been carrying, under a bush. Naturally the boy is exhausted sooner than his mother; he will die first. But the mother's eye cannot endure the sight of his death anguish; therefore she goes apart some

¹ Thus we are to read.

distance, but not—O loving and inconsistent mother heart!—not too far. Once more the affecting scene is described: *And she sat over against him; and he¹ lifted up his voice and wept.* The scene is meant to be impressed deeply upon our hearts. Here sits the mother waiting for the death of her son, and there lies the boy panting and crying for water. At this point we are to suppose a pause.—Then follows the third portion of the story, the turn of fortune, the rescue of Ishmael. 17. *And God heard the voice of the lad.* This statement, which puts an end to all the distress, echoes in the hearts of the listeners: "God heard," he is a God of mercy; God hears even the voice of weeping children; no one is too slight, not even a weeping child, for God to have compassion on him!—The saying is repeated in what follows. The angel exclaims to Sarah: *God hath heard the voice of the lad.* The narrator emphasises this statement thus because he has in it reached the point. He proposes to take up this phrase later in order to explain the name of Ishmael. It must be admitted that the narrator has worked up to this point, which he had all the time in view, in a remarkable manner. This is the supreme art of story telling. *Then the angel of God called to Hagar out of heaven and said unto her.* The Elohist, to whom we owe this beautiful account, speaks here of the angel of God, as in the other account the Jahwist speaks of the angel of Jahweh. Here too it is to be supposed that the original form of the story spoke of God himself, and that the later time substituted "the angel of God" out of religious respect. The same religious consideration explains also why the angel calls "out of heaven"; in the older legends the divinity himself comes upon earth, and appears like a man among men; thus it is in the first version of the Hagar story. But later times took offence at such an anthropomorphic conception of God, and preferred to say that God remained in heaven and talked with the patriarchs from there. In the present case the two views are combined: it is only an angel who speaks, and even he remains in heaven.—But the angel calls to Hagar: *What aileth thee, Hagar? fear not; for God hath heard the*

¹ Thus we are to read with the Septuagint.

voice of the lad where he is. The place where the boy lies is a definite place, a place where God hears, that is, a sacred place. This is a particularly fine touch, which we must not miss: in her supreme distress, when in her despair Hagar threw the lad down, she hit upon a place where God is near and hears; when her need was greatest, God's help was nearest. 18. *Arise, lift up the lad, and hold him firmly in thine hand;* do not give him up, for he is destined to great things; *for I will make him—an over-exuberant prophecy, especially to the ear of antiquity—a great nation.* Thus the angel gives Hagar new courage. 19. *And God opened her eyes, and she saw a well of water.* She sees all at once what she had not noticed before, a well. This touch, too, is true to life. A well is a deep hole in the ground, at the bottom of which is the water; such a well may be hidden from the eye by the slightest elevation of the surface, and is often not easily recognisable from a distance. Whether the well was already there, or whether it was called forth on the moment by God's word, we do not learn; the delicate tale draws a discreet veil over this point. In the original form of the story this well was without doubt a sacred well, a well at which God appears, God hears.

And she went and filled the bottle with water, and gave the lad drink. Here is a touching trait: we are not told that Hagar herself drank; that is mother-love.—The story is now finished; we expect further only the conference of names, customary at the close, and some notes as to Ishmael's future fortunes. The giving of names has been omitted by later editors, because the same names were already explained in other stories. But originally there must have appeared here, first, the name of Ishmael; it is evident that the original narrator must have given this from the fact that the name of Ishmael has been avoided in the story up to this point, and only the expression "the lad" employed; and next, the name of the well. According to the context this name was Beer-sheba: Hagar wandered in the wilderness of Beer-sheba. We may presume that the narrator interpreted this name as the well of "the one crying for help," beer sewa בְּאֵר שֶׁוּא: this is why he told at the point noted that the lad "cried for help." And now the further fortunes of

Ishmael: 20. *And God was with the lad, and he grew.* The growth of the lad in the midst of the dangers and hardships of the wilderness can only be explained as a miracle of God. *And*, when he became a man, *he dwelt in the wilderness of Paran*, between Canaan and Egypt (or Msr). 21. *And his mother took him a wife out of the land of Egypt.* This was originally a variant of the note that his mother was an Egyptian or a Musrith.

COMPARISON OF THE TWO ACCOUNTS.

The two accounts agree in the situation and in details. The actors are the same: the jealous Sarah, the tractable Abraham, the slave Hagar, who bears a child by Abraham before her mistress has a child. The principal action is also the same in both: first they describe a scene in Abraham's tent in which Sarah, jealous and cruel, urges Abraham and Abraham yields, and, at the close, Hagar's leaving Abraham's tent and going into the wilderness. Thereupon Hagar gets into great distress. Then the divinity intervenes. He reveals himself at the well and is moved by the misery of the fugitive. Thus Ishmael receives his name: "God hears," and the well too is named. Ishmael grows up in the wilderness and becomes a nation. The two accounts answer the same question: how did the people of Ishmael originate? and how did it come to be in the wilderness? how does it come by the sacred well where it dwells, and by the name of Ishmael? In many details also the two accounts agree; for example, in the fact that the God who speaks begins his words with a question to Hagar.

The conclusion from all this is that the two accounts are variants of one and the same story. The existence of such variants is not surprising, but rather the rule. These stories existed originally in oral tradition, and though we may have good reason for supposing our tradition to be very persistent and faithful, it is a matter of course that it cannot remain absolutely unchanged. Each one tells the story a little differently. When religion, ethical views, and æsthetic taste change, legend slowly follows them. Thus there arise variants and new versions. Such variants are found in our

book of Genesis in great numbers; the two accounts of Hagar are one of the most interesting examples of this.

The later collectors and editors, who put together all the material known to them, could not avoid the task of combining the variants into some sort of rational connexion. It is particularly instructive in the story of Hagar to watch the editor at his work. We have the first account from the hand of the Jahwist, the second from the hand of the Elohist; the editor who made them both a part of his work is therefore the editor of both Jahwist and Elohist, the so-called Jehovist. He could not leave the stories exactly as they were: Ishmael cannot be born, named, and brought up in the wilderness twice. Accordingly the editor left out in the first version Ishmael's growth, in the second his birth and name. But this was not sufficient. If in the first version Hagar flees, and in the second is cast out, then she must have returned to Abraham in the meantime; and the editor was obliged to state this expressly and give some reason for it. To this end he interpolated in the first account a command of the angel (xvi. 9): *Return to thy mistress and submit to the ill treatment which she inflicts upon thee.* And so poor Hagar has to go back home, only to be cast out later. The editor seems to have felt how hard the lot of Hagar was thus made, and in order to soften the matter a little he added a promise (10): *And the angel of Jahweh said unto her: I will multiply thy seed so that it may not be numbered for multitude.* That these words are an interpolation is evident from many indications; not only from the heavy style of the thrice-repeated "the angel of Jahweh said unto her," but especially from the fact that this command is out of accord with the whole course of the story: in the original story Jahweh intends to comfort Hagar for her humiliation, while in the addition he is sending her back into slavery; in the original form of the story Hagar has not at this point recognised the divinity, while the addition ignores this fact; moreover the promise that Hagar's descendants shall become a whole nation is too early here, for the story does not tell until later in the sequence that Hagar was to bear a son; the reverse would be the natural order. And so, although the additions are not entirely consistent with the original

legend, but actually spoil it, yet we must admit that the editor has performed his difficult and thankless task skilfully and with fidelity to the tradition.

But these are observations of minor importance. It is far more important and more interesting to compare the two variants. We have noted that such variants are often not accidental, but are small reflexions of great changes in the spiritual life of the people. Accordingly when we examine these variations we are no longer concerned with the works of individual authors or editors, but in fact with great currents of national life.

The two variants differ greatly in many details and especially in the tone of the whole. While the tender and emotional is prominent in the second version, in the first the tone is far more hearty and vigorous. This very important difference is seen especially in the drawing of the figure of Hagar. The first narrator enjoys the unbending force of the spirited woman; but the second story weeps over Hagar with many tears as a poor outcast slave. Accordingly the fortunes of Hagar differ much in the two versions: in the first case she fled in defiance; in the second she is driven away against her will. In the first case her distress consists in the mistreatment which her maternal pride will not endure, and the mistreatment affects herself alone; in the second case the distress consists in the expulsion itself: in the wilderness mother and child both incur the danger of death. For this reason the narrator of the second version lays all his stress upon the description of the misery of mother and child in the wilderness; the first version has not a single syllable for this misery. In the first version Sarah is jealous of the arrogant slave who is elevated to the rank of concubine; in the second, her jealousy is aimed at the slave child which she is not willing to have share the inheritance with her own. In the first version Hagar is acquainted with the wilderness: she goes, as her situation suggests, to the fountain in the wilderness; but in the second version she loses her way in the wilderness: not until God opens her eyes does she find a well. In the first story God hears of the mistreatment of Hagar; in the second, he hears the weeping of the child. All these differences result from the one capital difference, that in the

first story Hagar is painted in strong colors and vigorous shading; she is the genuine, defiant, untamable ancestress of the Bedouin; while in the second story the local colors are faded and Hagar has become the purely human figure of an outcast mother with her perishing child. From this point of view there can be no doubt that the first version is far older than the second. Later times had quite forgotten who Hagar really was: they no longer knew the tribe of Hagar. And the wilderness had grown more remote to the men of later times, who were themselves peasants or townsfolk: it seems to them only a land full of dangers, without paths or water. But at the same time—and this is the chief point—the times had become gentler and took more delight in tearful tales than in vigorous ones. We can find evidence elsewhere in Genesis of the increase of tenderer moods in later times.

This later origin of the second version is plainly seen in the fact that in the first version Ishmael receives his name, as is fitting, at his birth, while in the second he is not named until he is half-grown, which is clearly unnatural.—The religious conceptions of the second version are also later than those of the first. In the first, the divinity appears on earth in person; in the second, Hagar merely hears a voice from heaven. In the first, the divinity is pleased with the strong and vigorous woman—a religious conception with which we may perhaps compare that in the strenuous story of Samson; while in the second the religion too has become much gentler: the thought of God hearing the weeping of the child goes straight to the heart. The fact that the fountain was a place of worship is not prominent in either version; yet the first has preserved the primitive name of the god of the place. In any case, the second version is not servilely dependent on the first, but the changed form has been produced by a genuinely poetic soul and is at least the equal of the original: each in its way is a gem of legendary narrative.

I have finished. I have tried first to render the old legends alive again to the reader, and to introduce him to the moods and conceptions of olden time, and especially to the religious and ethical life of antiquity as it is displayed in these old tales. At the

same time I have tried to show the peculiar beauty of these remarkable narratives, and to interpret their style. But everywhere in the course of the investigation we have been led back to a history. For this is characteristic of the human mind, that it has a history; and it is impossible to interpret even the slightest spiritual product of man unless at the same time one gives its history. In these old legends, in which ancient Israel expresses itself without reserve, is found preserved the history of the national spirit of Israel. I have tried in the present chapter to give a few, even though humble, illustrations of this. I chose this particular legend for the reason that I believed that I could best exemplify the manner of investigation in a theme which does not involve dogmatic theories,—as might be the case in the story of Paradise. When all the stories have been investigated in this way, then we shall be prepared to draw pictures of ancient Israel that shall be true to life, and a history of its religious and ethical life in earliest times.

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THE FOOD OF LIFE AND THE SACRAMENT.

[CONCLUDED.]

MITHRAS WORSHIP.

THE Zarathustrian liturgy is called Yasna, or worship, and its most important part is the Myazda offering, accompanied with water libations, the Zaothra, and a communion of the sacred cup of the haoma drink. The Myazda is a small piece of flesh taken from a milch cow placed upon a round wafer or cake, called draona.¹ It is given to the faithful worshippers of Ahura Mazda with these words:

"Eat, O ye men, of this Myazda, the meat-offering, ye who have deserved it by your righteousness and correctness.

"Mayest thou, O Ahura Mazda, reign at thy will and with a saving power rule over thine own creation," etc.²



ASSYRIAN RELIEF FROM NIMROD.³

All things connected with the Myazda ceremony are sacred, the words of the ritual, the wafers, the cup and the mortar in which the flour is prepared. Further, the twigs of pomegranate, date, or tamarind trees, which the priests hold in their hand; the cup and all other implements of this ceremony, are the weapons with

¹ *Afânagan*, 3. *Sacred Books of the East*, Vol. XXXI., p. 368.

² Illustrating a spring festival celebrated with sacred sprigs. Layard, *Mith.*, Plate XVI., 7a.

³ *Yasna*, VIII. *S. B. of the E.*, Vol. XXXI., p. 229.

which Angra Mainyu, the evil spirit, is overcome, in the same way as Christians may be said to conquer Satan through the holy Sacrament. Zarathustra threatens to smite Angra Mainyu and all his demons of evil, "till the fiend-smiting saviour comes up to life out of the lake Kûsava from the region of the dawn," and he adds:¹

"The sacred mortar, the sacred cup, the Haoma, the Words taught by Mazda, these are my best weapons. By this Word will I strike, by this Word will I repel, by this weapon the good creatures (will strike and repel thee), O Evil-doer, Angra Mainyu!"

The Saviour whose coming Zarathustra prophesies is the son of a virgin that became with child while bathing in the lake; and his name will be "the All-Conqueror, Righteousness Incarnate, the Benefactor, the Saviour." His arrival will usher in a millennium.



SIDE SURFACE OF A CONE OF CHALCEDONY.²

The world will be renewed; the dead will rise from their graves for judgment, and all the good will receive transfigured bodies that cast no shadows. This will be the Good Kingdom (*Vohu Khshathra*) or the kingdom wished for (*Khshathra Vairya*), which is personified as the spirit of God's Kingdom and plays a rôle not quite unlike to that of the Holy Ghost in Christianity.

The pious worshipper of Ahura Mazda prays for the coming of the kingdom:

"May Ahura Mazda strengthen us through the Royal Power of the kingdom."
Yasna, XLV., 9.

¹ *Vendidad* (Fargard XIX.). *S. B. of the E.*, Vol. IV., p. 203-207.

² Illustrating a spring festival celebrated with sacred sprigs. Layard, *Mith.*, Plate XVI., 7a.

The Yasna LIII. concludes with these words:

"Mazda, thine is that power and thine the kingdom, and by it thou bestowest the highest¹ [bliss] on the righteous poor."²

Mithras, an old solar deity, probably older than Zarathustra, becomes with the ascendancy of Ahura-Mazda one of the archangels



BAS-RELIEF OF NEUENHEIM.³

and is more and more identified with the virgin-born Saviour whose coming Zarathustra has promised, assuming in the end a rank anal-

¹ The *summum bonum*.

² *Zend-Avesta*, Part III. *S. B. of the E.*, Vol. XXXI., p. 194.

³ This monument which has escaped the fate of mutilation by the hands of fanatics, was discovered in 1838 in a cave near Neuenheim, west of Heiligenberg, by workmen laying the foundation of a farm house. It is interesting because it shows very clearly twelve small bas-reliefs exhibiting scenes from the life of Mithras, beginning with his birth from the rocks on the top of the left border passing over to the right side where he catches the bull, carrying him to the cave so as not to show the footprints of his hoofs and ending on the top border, where his ascent to Ahura Mazda is represented. Some of the scenes have not yet been explained satisfactorily. Of interest is the second one, in which Ahura Mazda hands to Mithras the scepter of the government over the world.

ogous to that which Christ holds in Christianity. In the *Mihir Yast* we read:

"Ahura Mazda spoke to Spitana Zarathustra, saying: 'Verily, when I made Mithra, the lord of wild pastures,¹ O Spitana, I created him as worthy of sacrifice, as worthy of prayer as myself, Ahura Mazda.'"

In the days of Alexander the Great, Mithras worship was as

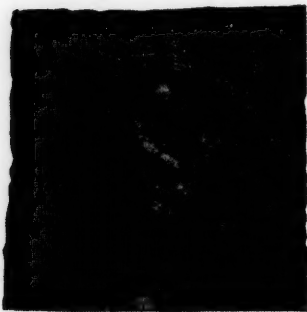


MITHRAS BETWEEN THE DIOSCURI.

(Ancient gem.) Underneath the altar with the Myazda wafers and the cup of the Mithraistic Eucharist.³

officially established in Persia as the Christian religion is to-day in Europe, and the king regarded himself as "the king of kings, kin to the gods, seated on the throne together with Mithras, the god, and rising with the sun."²

There can scarcely be any doubt about the historical connexion of the Mithras worship of ancient Persia with the Mithras worship that began to spread over the Roman Empire at the time of Trajan (97-117 A. D.). During the second century it became the favorite religion of the Roman armies and soon spread through the districts on the Danube, the Rhine, Gaul, Dacia, Africa, and of course also reached Rome. It is probable, however, that through contact with Chaldæan superstitions and astrological beliefs the original purity of the faith of the Zendavesta was lost in the later Mithras worship.



MITHRAS MONUMENT OF OSTBURKEN.⁴

¹ The word "wild" is probably an inept translation and might have been replaced by "wide, unbounded," or should be interpreted as "of natural growth."

² βασιλεὺς βασιλέων καὶ θεῶν συγγενής, σύνθρονός τε θεῷ Μίθρᾳ καὶ συνανατέλλων τῷ ἡλίῳ. See Franz Cumont, *Textes et monuments figurés relatifs aux mystères de Mithra*, II., pp. 37-38. Brussels, 1896.

³ From Walsh, *Ancient Coins, Medals, and Gems*.

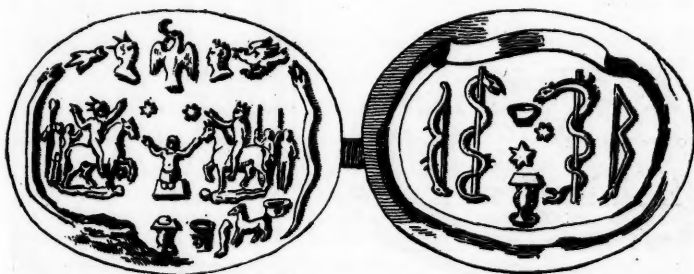
⁴ Springer's *Handbuch der Kunstgesch.*, I. p. 283.

Mithras resembled Christ in several most significant features. He is not Ahura Mazda, the Lord Omniscient, himself, but a divine person equal in dignity to him; he is the high-priest of an atonement through blood, a saviour from eternal damnation, a leader in battle for the cause of righteousness, and a conqueror against whom the hosts of the fiend cannot prevail.

Mithras was born into the world from the rocks, perhaps symbolising the origin of fire from flint, and worshipped by shepherds, for the Persians are a pastoral people. He performed deeds of valor and slew, at the request of the Lord Omniscient, the glorious primordial bull from whose body he shaped the animate creation. He is called the



MITHRAS BORN FROM THE ROCKS.
Holding in his hand the grape which replaces in the West the Haoma of the Persians.¹



A MITHRAISTIC CAMEO.

Showing Mithras born from the rocks between the Dioscuri, surrounded by Mithraistic symbols, among them the cup and bread of the Eucharist.

mediator (ὁ μεσίτης),² because before the end of this world he will rescue his creatures from sin through the sacrificial atonement of

¹ Reproduced from F. Cumont, p. 231, after Lajard, Plate CIII.

² Plutarch, *De Isid. et O.*, 46.



Fig. 212.



Fig. 211.



Fig. 213.

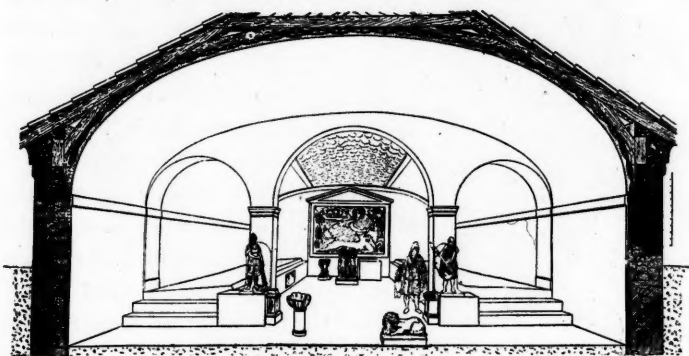
FRAGMENTS OF A BAS-RELIEF IN WHITE ITALIAN MARBLE.

Found in the Zollfeld, now in the Historical Museum of the Rudolfinum at Klagenfurt, Austria.¹

¹ The central part of the monument is utterly destroyed, probably by Christian iconoclasts; the head of the sun-god from the left-hand corner alone being left.

the blood of another bull of similar significance. Having fought the good fight for the salvation of mankind, Mithras ascends to heaven and prepares the millennium for his good and faithful followers.

The mysteries of Mithras were celebrated in a cave which Porphyry calls a symbol of the universe.¹ In spite of the rigid monotheism of the Zendavesta, Mithras worship did not come



MITHRÆUM, WEST OF THE VILLAGE OF PETRONELL, NEAR HINTAUS
RIED, AUSTRIA.² (Restored by Mr. Tragau.)

into conflict with the Pantheon of the Greek and Roman gods, for many of these were re-interpreted as equivalents of certain religious conceptions of Iran. Ahura Mazda was called Zeus Or-

The left border represents a Hellenised illustration of Ahura Mazda's struggle with demons, after the pattern of the *giganto machia*. The lower part of the same fragment exhibits the birth of Mithras and two shepherds who figure as torch-bearers. The right border shows scenes from the life of Mithras, among them Mithras crowning the sun-god with a halo of rays and ascending in the solar chariot to heaven.

¹ *De Antr. Nymph.* εἰκόνα φέροντες τοῦ σπηλαίου τοῦ κόσμου.

² This Mithraeum, like all others of the same style is underground. Before the great bas-relief of Mithras slaying the bull are two altars, the one large and square in form, the other smaller and richly ornamented. The small statue on the left is Mithras being born from the rocks. At the entrance we see on the right the lion of Mithras and on the left a fount for holy water. The two torch-bearers have their stand at the pillars which separate the aisles. The Mithraeum is approached by a staircase and through a square hall (or pronaos) which is considerably larger than the sanctum itself.

madz; a personification of the Haoma drink was identified with Dionysus. The sun became Helios, the moon Artemis, the seven planets were represented after Greek fashion, etc.

The sacred cup and the bread wafers are frequently represented upon Mithraistic medals, and the church-fathers declare that devils had imitated in the Mithraistic rites the sacraments of the Lord. With all due deference to the opinion of these saintly men, we must remember that Mazdaism with its sacramental rites including the offering of the Haoma drink and the Myazda cakes, is older by several centuries than Christianity.



ÆON OR ZRVAN AKARANA.
Unlimited Time.¹

Monuments discovered all over the Roman Empire constitute one of the most important sources of Mithras worship. Few of them are in good preservation, for the religious fanaticism of the third and fourth centuries destroyed some and mutilated others. Some figures are quite puzzling at first, but patient inquiry has succeeded in unravelling all the salient features of this remarkable religion.

There are innumerable Mithraeums with altar-pieces representing the sacrifice of the sacred bull by the hand of Mithras, on either side a daduchos or torch-bearer, one holding his torch upward, the other downward. There are innumerable gems with Mithraistic symbols on them, and scenes from the life of Mithras, among them the official transfer of the

¹ The statue here reproduced was found in the Mithraeum of Ostia, where C. Valerius Heracles and his sons dedicated it in the year 190 A.D.; it was figured for the first time by Lajard in his *Recherches sur Mithra*, Plate LXX. Similar statues are found in various Mithras caves.

world's government to him by the Creator Ahura Mazda, his divine father.



SASSANIAN BAS-RELIEF. ORMAZD PRESENTS THE CROWN TO ARDASHIR.
(From Curzon, *Persia*, II. p. 125.)



ORMAZD WITH THE CIRCLE OF SOVEREIGNTY
AND THE SCEPTRE OF POWER.
(From the Sassanian bas-relief.)

On ancient Persian monuments Ahura Mazda is represented mostly as governing the world and giving umbrage to kings or as

transferring the ring of sovereignty to his anointed vicegerents on earth. They differ from Christian representations of analogous scenes mainly in exhibiting a more martial character.

Æon, the lion-faced, with key, torch, and measuring staff is a divinity of considerable importance in the religion of Mithras. He is the *Zrvan Akarana* (Time unlimited) of the *Zend Avesta*, not so much a personality as a personified abstraction, representing the



THE TAKHT-I BOSTAN SCULPTURE.¹

primordial state of existence from which Ahura Mazda is born. Statues of Æon are found in many Mithræums, displaying re-

¹ Not far from Behistan near the city of Kermānshāh in the valley of Takht-i-Bostan there are sculptures on a rock supposed to contain a representation of Zoroaster. The sixth group, which is the last in the row, exhibits three standing figures with a fourth one being trampled under foot by the two crowned men on the right hand side. It may represent Ormazd or Ahura Mazda, the Lord Omniscient handing the ring of sovereignty to Mithras after the final conquest of Ahriman. But it may as well be an Iranian king rewarding his victorious son by making him sharer in the rule of empire. The downtrodden foe would be the enemy of Mazdaism, a figure representing the conquered Arsacidæ. The man behind the King standing upon a tree, holding a staff in his hands and surrounded with a halo of rays is commonly and perhaps without exception assumed to be Zoroastra the prophet.

markable crudity of invention. The serpent's coils that surround his body represent the revolutions of time, his wings the four seasons. His relation to the deities of the Greek pantheon, Hephæstus, Æsculapius, Hermes, and Dionysius, is indicated by the presence of their emblems.



MITHRAS AND KING ANTIOCHUS
OF COMMAGENE.



AHURA MAZDA AND ARTAGENES.

Bas-reliefs of a temple built by Antiochus I. (69-34 B. C.) on the Nemrood Dagh, Taurus Mountains.¹

The most important passages concerning Mithras worship are found in the writings of Justinus Martyr and Tertullian. Justinus says:

"The Apostles, in the memoirs composed by them, which are called Gospels, have thus delivered unto us what was enjoined upon them; that Jesus took bread, and when he had given thanks, said, 'This do ye in remembrance of me, this is my body;' and that, after the same manner, having taken the cup and given thanks, he said, 'This is my blood'; and gave it to them alone. Which the wicked devils have imitated in the mysteries of Mithras, commanding the same thing to be done. For, that bread and a cup of water are placed with certain incantations in the

¹ From Franz Cumont (*l. l.*, p. 188) after Hermann und Puchstein, *Reisen in Klein Asien*, Berlin, 1890, Plate XXVIII., 2, cf. pp. 321 ff., and Plate XXXI., 1.

mystic rites of one who is being initiated, you either know or can learn." *Ante. Nicene Christian Library*—Justin Martyr, Vol. II., p. 65.

Tertullian is a little more explicit, but agrees in sentiment as well as in his opinion with Justinus Martyr. In a passage where he declares that Christian heresies like Pagan religions are in-



MITHRAS THE SAVIOUR. (Borghesi Monument, now at the Louvre in Paris.)¹

ventions of the Devil, he mentions Mithras worship on account of its obvious similarity to the Christian ritual, adding that even the ideal of chastity is recognised by the Pagans, since they have insti-

¹ The monument bears the inscription "Deo Soli Invicto Mithrae." Mithras sacrifices in a cave a bull for the forgiveness of sins. A dog licks the dripping blood, called "nama sebesion" (the sacred fluid). A serpent crawls on the ground. A scorpion pinches off the bull's testicles. A youth at the left turns a torch upwards, at the right, downwards. A raven, which here looks like an owl, witnesses the scene. Over the cave, the sun-god, Helios, and the goddess of the moon, Selene, drive past in their chariots.

tutions like Christian nunneries, and their high-priest, being a widower, is not allowed to marry again. He must be one wife's husband for time and eternity, an injunction which St. Paul would also make for a Christian bishop (1 Tim. iii. 2).



STATUES OF TORCHBEARERS IN A MITHRÆUM OF OSTIA.
Now in the Lateran.

Tertullian says in his prescription against heretics, Chap. XL:

"The very Scriptures were even arranged by the will of God in such a manner as to furnish materials for heretics, inasmuch as I read that 'there must be heresies,' which there cannot be without the Scriptures.

"The question will arise, By whom is to be interpreted the sense of the passages which make for heresies? By the devil, of course, to whom pertain those wiles which pervert the truth, and who, by the mystic rites of his idols, vies even with the essential portions of the sacraments of God.

"He, too, baptises some,—that is, his own believers and faithful followers; he promises the putting away of sins by a laver [of his own]; and if my memory still serves me, Mithra there [in the kingdom of Satan] sets his marks on the foreheads of his soldiers; celebrates also the oblation of bread, and introduces an image of a resurrection, and before a sword wreathes a crown.



SILVANUS.

Picture in the niche of a sanctuary connected with the Mithræum in Ostia near the baths built by Antoninus Pius. Silvanus is ready to act as a priest of Mithras, having in one hand a fir branch, in the other a hatchet such as are frequently found in the ruins of Mithræums.

"What also must we say to [Satan's] limiting his chief priest to a single marriage? He, too, has his virgins; he, too, has his proficients in continence. Suppose now we revolve in our minds the superstitions of Numa Pompilius, and consider his priestly offices and badges, and privileges, his sacrificial services, too, and the instruments and vessels of the sacrifices themselves, and the curious rites

of his expiations and vows: is it not clear to us that the devil imitated the well-known moroseness of the Jewish law?

"Since, therefore, he has shown such emulation in his great aim of expressing, in the concerns of his idolatry, *those very things of which consists the administration of Christ's sacraments*, it follows, of course, that the same being, possessing still the same genius, both set his heart upon, and succeeded in, adapting to his profane and rival creed the very documents of divine things and of the Christian saints,—his interpretation from their interpretations, his words from their words, his parables from their parables. For this reason, then, no one ought to doubt, either that 'spiritual wickednesses,' from which also heresies come, have been introduced by the devil, or that there is any real difference between heresies and idolatry, seeing that they appertain both to the same author and the same work that idolatry does."

The crown was a Christian symbol, and the sword of martyrdom was welcome to those who were eager to receive the crown of



PLAQUE OF HELIOTROPE AGATE REPRESENTING MITHRAISTIC SYMBOLS.
(Engraved in intaglio and used as a seal.)

life of which the Apostle speaks,—a crown of unfading flowers. The soldiers of Mithras, which is the name of one of the seven degrees, were, when initiated into the fraternity, made conscious that they must be fighters, and so a sword was placed on their heads, for they should be ready to die for the cause of the god of

¹The front exhibits the bull-slaying Mithras, the dadouchoi or torch-bearers, the dog, the scorpion, the raven, the snake (mostly destroyed) the sun-god, the moon-goddess, all of which occur on every Mithras monument, and in addition an eagle with spread wings, the seven planets (not counting the sun before the sun-god which was a different shape) the thunderbolt of Zeus, the harp of Saturn (below the mantle of Mithras and partly injured), a halo of rays with a cross, a tree with a mask (perhaps a skull), the staff of Hermes, an arrow (of Mars?). The reverse represents the lion of Mithras with a bee in his mouth and the seven planets with their names in an unknown tongue. The frequent occurrence of EL and AL, i. e., God, the former form appearing five times, the latter twice, indicates that we have to do with a semitic dialect.

light, but at the same time they should scorn the transient flowers of worldly crowns, because a soldier of Mithras glories only in the immortal crown that will never perish, which is Mithras. Tertulian says in the last chapter of his essay on the crown :

"What have you in common with the flower which is to die? You have a flower in the Branch of Jesse, upon which the grace of the Divine Spirit in all its fulness rested,—a flower undefiled, unfading, everlasting, by choosing which the good soldier, too, has got promotion in the heavenly ranks. Blush, ye fellow-soldiers of Christ, henceforth not to be condemned even by him, but by some soldier of Mithras, who, at his initiation in the gloomy cavern, in the camp, it may well be said, of darkness, when at the sword's point a crown is presented to him, as though in mimicry of martyrdom, and thereupon put upon his head, is admonished to resist and cast it off, and transfer it to his shoulder, saying that Mithras is his crown. And thenceforth he is never crowned ; and he has that for a mark to show who he is, if anywhere he be subjected to trial in respect of his religion ; and he is at once believed to be a soldier of Mithras if he throws the crown away,—if he say that in his god he has his crown. Let us take note of the devices of the devil, who is wont to ape some of God's things with no other design than, by the faithfulness of his servants, to put us to shame, and to condemn us."¹

Professor Franz Cumont, perhaps the best authority on the subject, sums up his opinion as follows :

"When the reader reconsiders what we have stated about the religion of Mithras, he will be surprised at its similarity to Christianity. Like the Christians, so the adherents of the Persian god lived in close relationship with one another, using the terms 'fathers' and 'brothers.' Like the Christians, they had baptism, a kind of communion ; they taught an imperative morality, preached continence, chastity, self-abnegation, and self-control. They speak of a deluge, believe in the immortality of the soul as well as the resurrection of the dead, in a heaven of the blessed ones and a hell inhabited by the powers of evil. We have seen that the theology of the mysteries conceived Mithras as equivalent to the Alexandrian Logos. We may fairly assume that these features are not the sole similarities between him and Christ, and that the illustration of the god sacrificing against his

¹ I refrain from heaping quotations, and refer the reader to the second volume of Franz Cumont's work on the texts and monuments of Mithras (quoted above) which contains a diligent collection of almost six hundred passages relating to Mithras worship. The enormous number of Mithraistic monuments and allusions to Mithras in the writings of antiquity prove the great extension of Mithras worship. For our present purpose no passages are of more importance than those quoted above.

inclination the primordial bull¹ for the purpose of creating the human kind and then redeeming it from death, has been compared with the Saviour who sacrificed himself for the salvation of the world. We could even trace the worship of the shepherds, a communion scene, and an ascension of Mithras to heaven in those legends. Augustine tells us that he had met a Mithras priest (*Pileati sacerdotem*²) who used to say, 'The Hooded One himself is Christian' (*et ipse Pileatus christianus est*). Since the second century the pagan philosophers began to contrast the Persian mysteries with Christianity, apparently to exhibit their superiority (Celsus in Origen's *Contra Celsium*), while on the other hand the church-fathers insist on the explanation of these analogies between both religions as due to an imitation of devils."³

Considering the similarity of the Christian communion to the Myazda offering of the Mithras worshippers, the suggestion offers itself that the very name of the Lord's Supper among the Romans, which is *Missa* (or in English "Mass"), the etymology of which is as yet an unsolved problem, might have been derived from the word *Myazda*.⁴

If Mithras worship was so similar to Christianity, the question seems in order as to why it disappeared and left no traces. M. Renan goes so far as to say that if Christianity had ever been checked in its expansion, the world would now be Mithraistic. We beg to differ from this opinion and would suggest the following explanation as the most plausible reason for the failure of Mithraism.

Mithras worship, as practised in the Roman camps, was not so much a religion free to all and preached on the housetops, as a ceremonial of a secret society. Accordingly a Mithræum was not so much like a church as it was like a masonic lodge, and the worshippers of Mithras were not a congregation open to the rich and the poor alike, but an aristocratic fraternity of seven degrees, the

¹ Christ is frequently compared to a white bull in the Book of Enoch and other apocrypha.

² Pileatus, i. e., "the Hooded One," is a cognomen of Mithras.

³ Roscher's *Lex. d. G. u. R. Mythologie*, pp. 3066-3067.

⁴ We deem it not at all improbable that the word "Myazda" was imported into Hebrew to denote the unleavened bread, eaten at the festival of the unleavened bread, which is called in the Bible מצה (*matzta*). This term does not look like an original Hebrew word, and is certainly not derived from the Hebrew root of the same sound מצה, which means "to suck."

members of which had to be initiated by passing through an elaborate system of ordeals, of which traces are perhaps still preserved in the masonic order. While Mithraism was apparently very exclusive, Christianity adopted many Mithraistic conceptions and institutions. Christian authors set forth with a logic that is peculiarly their own the arguments as to why it was proper to celebrate the Nativity of Christ on the very same day on which the Pagans celebrated the nativity of Mithras.¹

For a while Mithraism flourished, especially after the reign of Commodus who was initiated into its mysteries. It was fashion-



MITHRAS BORN FROM THE ROCKS.²

With the dagger of sacrifice symbolising the vicarious atonement through blood and the torch of enlightenment.



SOL THE SUN-GOD.²

Installed by Mithras as the governor of the world, as indicated by the halo of rays and the globe of power.

able, and presumably expensive. But when Constantine threw the weight of imperial favor into the balance of Christianity the fate of Mithraism was sealed forever.

Whether or not the Zarathustrian Myazda offering is historically connected with the Assyrian myth of the food of life, we have no means of ascertaining, but we need not hesitate to say that prob-

¹ For details see *The Open Court*, Vol. XIII., No. 12, pp. 725—730, in an article on "The Nativity."

² Reproduced from Cumont (*l. l.* II., p. 188, figures 10 and 11).

ably it is. At any rate, it is based upon the same idea, and there are analogous institutions among savages and semi-civilised people all over the world.

CHRISTIAN RITES: THE BREAKING OF BREAD, THE AGAPE AND THE LORD'S SUPPER.

Considering the all but universal usage of symbolising the preservation of life by a sacramental eating of some primitive food, we must expect to find traces of the idea in the ritual of the Hebrews; and indeed communion meals are a fundamental principle in the ancient Jewish institutions. The father of the family broke the bread and gave thanks, saying: "Blessed is he who created the fruit of the earth"; and raising the cup, he added: "Blessed is he who created the fruit of the vine."¹ This custom was most punctiliously adhered to by all pious Jews, and we know that Jesus observed this tradition of his people whenever an opportunity offered itself. This appears especially from the Synoptic Gospels where they relate the miracle of the five loaves and the fishes. Mark (the oldest account of the three) says²:

"And when he had taken the five loaves and the two fishes, he looked up to heaven, and blessed, and brake the loaves, and gave them to his disciples to set before them; and the two fishes divided he among them all."

The same miracle is reported twice by Matthew and Mark, only with this variation that the second time seven loaves are mentioned instead of five, and seven baskets full are saved instead of twelve.³

The congregation of Jerusalem continued the practice of breaking bread, which (as we learn from Acts ii. 42) was not done in the temple, or in a synagogue, or in any official place of worship, but in the houses of the Nazarene brethren.

That the early Christians celebrated love feasts or feasts of charity is apparent from passages in the second epistle of St. Peter

¹ "Benedictus qui creavit fructum terrae; benedictus qui producit panem e terra;" and "benedictus qui creavit fructum vitis." 1. Tr. Beraeth VI. 1.

² See also Matth. xiv. 19, and Luke ix. 16.

³ See Matth. xv. 36, and Mark viii. 6.

and the epistle of St. Jude;¹ the custom is also alluded to in the Revelation of St. John; and judging from the description of early Christian life at Jerusalem in the Acts, we cannot doubt that the communal meals of the Christians were simply a continuation of the same pre-Christian practice. There is no evidence whatever for the assumption that in the early days of Christianity the eucharist and the agape were different institutions. On the contrary they are quite undistinguishable, and if there is anything that characterises them in distinction from ordinary meals it is the practice of breaking the bread and giving thanks. This practice, however, is (as we have seen) not exclusively Christian, but was practised in Judæa, mainly by earnest sectarians, such as the Nazarenes and the disciples of St. John the Baptist, congregations, which, as we know, had been exposed to Persian influences and entertained many Gnostic notions. It is peculiar that the days for these communal meals of breaking the bread and giving thanks were not the Sabbath, but the Sunday, the sacred day of Mithras.

The disciples at Troas are specially reported to have met on Sundays. That Paul should have introduced this custom in celebration of the rising of Christ is neither reported in the Acts nor is there any justification to imply it. The day of resurrection was by no means fixed among the early Christians, for sometimes it is reported that Christ would rise on the third day, and then again after three days, which would bring the event down to Monday in the afternoon. The statement in the Acts is quite explicit that the congregation of disciples whom St. Paul visits in Troas celebrated Sundays with a communal bread-breaking before their conversion, and the fact is represented as the prevailing custom in these words:

"And we sailed away from Philippi after the days of unleavened bread, and came unto them to Troas in five days; where we abode seven days.

"And upon the first day of the week, when the disciples came together to break bread, Paul preached unto them, ready to depart on the morrow; and continued his speech until midnight."

We cannot very well assume that "the disciples of Troas" were Christians before St. Paul's arrival. Disciples is a name of

¹ Ep. St. Jude 12.

the Zabeans, the sect to which John the Baptist belonged as we know, e. g., from the report in Chapter xix. of the Acts. The respect paid to the sun by the Essenes, with other indications of Mithraistic influences, makes it probable that it was an un-Jewish influence which caused the Sunday to be so commonly regarded as the proper day for the celebration of love feasts.

The Christian love feast, or as the Greek called it, *agape*, was a common dinner, and we learn from the first Epistle of St. Paul to the Corinthians that its celebration was very different from both



THE MARRIAGE FEAST OF CANA REPRESENTED AS A EUCHARISTIA.
Fresco in the cemetery of St. Pietro e Marcellino.

the Roman Mass and the Lord's Supper of the Protestants. It was different, too, from the Nazarene bread-breaking of the early Christians at Jerusalem. It was no longer taken in the homes of the brethren (as practised by the Nazarenes of Jerusalem), but in the church after the fashion of modern picnics, and was even less brotherly; for every one brought his own meal along and ate for himself. It lacked dignity and was sometimes disturbed by disorderly conduct. St. Paul takes the Corinthians severely to task and requests them to remember in their "eucharistia" the sacrificial death and the resurrection of the Lord.

As the passage is of great importance, we quote it in full:

"When ye come together therefore into one place, this is not [the way] to eat the Lord's supper.

"For in eating every one taketh before other his own supper: and one is hungry, and another is drunken.

"What? have ye not houses to eat and to drink in? or despise ye the church of God, and shame them that are needy? What shall I say to you? shall I praise you in this? I praise you not.

"For I have received of the Lord that which also I delivered unto you, That the Lord Jesus the same night in which he was betrayed took bread:

"And when he had given thanks, he brake it, and said:

"Take, eat: this is my body, which is broken for you: this do in remembrance of me.

"After the same manner also he took the cup, when he had supped, saying,

"This cup is the new testament in my blood: this do ye, as oft as ye drink it, in remembrance of me.

"For as often as ye eat this bread, and drink this cup, ye do show the Lord's death till he come.

"Wherefore whosoever shall eat this bread, and drink this cup of the Lord, unworthily, shall be guilty of the body and blood of the Lord.

"But let a man examine himself, and so let him eat of that bread, and drink of that cup.

"For he that eateth and drinketh unworthily, eateth and drinketh damnation to himself, not discerning the Lord's body.

"For this cause many are weak and sickly among you, and many sleep.

"For if we would judge ourselves, we should not be judged.

"But when we are judged, we are chastened of the Lord, that we should not be condemned with the world.

"Wherefore, my brethren, when ye come together to eat, tarry one for another.

"And if any man hunger, let him eat at home; that ye come not together unto condemnation. And the rest will I set in order when I come." (1 Cor. xi. 20-34.)

The moral seriousness of St. Paul's reformatory activity wrought a great change in the celebration of the eucharist.

The next important report as to the way in which the sacrament was celebrated among the early Christians is found in the first apology of Justin Martyr, which reads as follows:

"After the believer is baptised, and so incorporated or made one with us, we lead him to the congregation of the brethren, as we call them, and then with great fervency pour out our souls in common prayers both for ourselves, for the person

baptised, and for all others all the world over; that having embraced the truth, our conversation might be as becometh the Gospel, and that we may be found doers of the word, and so at length be saved with an everlasting salvation. Prayers being over, we salute each other with a kiss. After this, bread [and a cup of wine¹] and water are brought to the president or bishop, which he takes, and offers up praise and glory to the Father of all things, through the name of His Son and the Holy Spirit; and this thanksgiving to God for vouchsafing us worthy of these His creatures, is of a prayer of more than ordinary length. When the bishop has finished the prayers and the thanksgiving service, all the people present conclude with an audible voice, saying Amen. Now Amen in the Hebrew tongue is, 'So it be.' The Eucharistical office being thus performed by the bishop, and concluded with the acclamation of all the people, those we call deacons distribute to every one present to partake of this Eucharistical bread [and wine] and water, and then they carry it to the absent.

"This food we call the Eucharist, of which none are allowed to be partakers, but such only as are true believers, and have been baptised in the laver of regeneration for the remission of sins, and live according to Christ's precepts; for we do not take this as common bread and common wine; but as Jesus Christ our Saviour was made flesh by the Logos of God, and had real flesh and blood for our salvation, so are we taught that this food, which the very same Logos blessed by prayer and thanksgiving, is turned into the nourishment and substance of our flesh and blood, and is in some sense the flesh and blood of the incarnate Jesus. . . ." "After this sacrament is over, we remind each other of the obligations to duty, and the rich relieve the poor; and upon such charitable accounts we visit some or other every day."

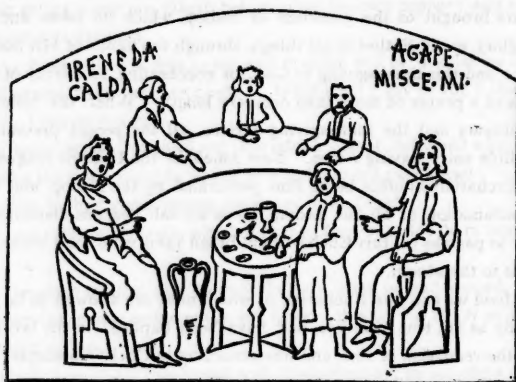
Justin adds the significant complaint quoted above on page 353, last paragraph, that through a strange contrivance of the evil spirits the same ceremony was celebrated in the same way by the worshippers of Mithras, the Christ of Mazdaism.

That in the days of St. Paul the Pagans celebrated love feasts which resembled the Christian sacraments becomes manifest from the contrast which appears in the apostle's speaking of the Lord's cup and the cup of devils, that is to say, of the Pagan deities.

We notice at the time of Justin Martyr one important change in the Christian sacrament since the days of St. Paul. The celebration of the Eucharist is no longer a real meal, as it was in Jeru-

¹ Harnack regards the mention of the wine as an interpolation, as will be seen later on, and claims that the elements of the Lord's Supper in the early Church were as a rule bread and water, and only exceptionally bread and wine.

salem among the Nazarenes and in the congregation at Corinth, but has become a purely symbolical partaking of the sacred bread. In the days of St. Paul the Lord's Supper or Eucharist was identi-



CHRISTIAN LOVE FEAST.

Fresco in the cemetery of St. Pietro e Marcellino.

cal, with the agape or love feast, the Roman *charistia*. When the communion (i. e., the meal taken in common) under the influence



CHRISTIAN LOVE FEAST.

Fresco in the cemetery of St. Pietro e Marcellino.

of St. Paul's conception of it, ceased to be a real meal and changed into a mystical ceremony after the pattern of the Mithraistic ritual, the agapes continued to be celebrated and we find now two distinct

institutions, the mass and the agape or brother-meal. The latter is frequently pictured in the Catacombs, and we reproduce here one of the most typical representations of it, which was discovered in a subterranean chapel in the cemetery of Marcellinus and Peter.

Charles Maitland, in his interesting book, *The Church in the Catacombs: A Description of the Primitive Church of Rome*, speaks of the subject as follows (p. 209):

"In this painting the three guests are seen seated, and a page supplies them with food from the small round table in front, containing a lamb and a cup. The two matrons who preside, personifying Peace and Love, have their names written above their heads, according to the Etruscan practice.

"The inscriptions should be read: '*Irene—Da calda (m aquam)*'; and, *Agape—Misce mi (vinum cum aqua)*,' i. e., 'Peace, Give hot water; Love, Mix me wine.'

"The original Agape, or love-feast, was a truly Catholic element of ancient Christianity. Begun in the purest spirit, it shared the fate of some other ordinances, till in the fifth century it became a scandal to all Christendom. It is first mentioned by St. Jude, in the passage, 'These are spots in your agapæ,' *ἐν ταῖς ἀγάπαις ὑμῶν*, translated in our version, 'feasts of charity.'"¹

How similar the Pagan love feasts were to the Christian eucharist appears from the similarity of the pictures of both institutions; and both were held to have same mystic reference to the life beyond the grave. We here reproduce the illustrations of the tomb of Vibia, wife of Vincentius, a priest of Sabarios (Dionysos). Vibia is snatched away by Pluto after the manner of the rape of Proserpine, Hermes, the leader of souls to Tartarus leading the way. In the second picture she appears led by Hermes and Alcestis (the classical prototype of a faithful wife) before the throne of Dispiter and Aeracura, the Jupiter infernus and Juno inferna. Three fates attend the scene.² The gesture of the judge indicates that Vibia is deemed worthy of being admitted to the bliss of Ely-

¹ Maitland is mistaken in several points; the first mention of the Christian "agape" is not by St. Jude, but in St. Paul's Epistles, and the excesses of the Christian love-feasts did not make their appearance later on, but were noticeable at the very start. We may assume that the Pagan love-feasts were sometimes not much better.

² It is strange that one of the fates is apparently a man.

sium ; and an angel¹ (angelus bonus) conducts her to the eucharist of the blessed in the Elysian fields. On the third picture Vibia appears twice at the entrance and at the table of the celestial banquet.



THE RAPE OF VIBIA AND HER DESCENT.



BEFORE THE TRIBUNAL OF THE RULER OF THE NETHER WORLD.

The last picture shows Vincentius himself as one of the seven priests of Sabazios seated at the Dionysian eucharist. Each loaf

¹ The idea of angels is not exclusively Christian but was quite common in classical antiquity at and long before the age in which Christianity originated. Plato speaks of "the angel of Elysium" in *Rep.* X. p. 619 B.

of bread on the table bears an equilateral cross with dots between its arms, according to ancient Roman custom.¹

THE PROBLEM OF THE INSTITUTION OF THE LORD'S SUPPER.

Justin quotes in his report the institution of the Lord's Supper from the memoirs (*apomnemata*) of the apostles called the gospels



THE LOVE FEAST IN THE ELYSIAN FIELDS.



THE SEVEN PRIESTS, VINCENTIUS AMONG THEM.

(which of course need not be our Gospels) and it is true that Mark, the oldest, and also Matthew and Luke contain the Eucharist formula in almost the same words. In addition the formula is mentioned in the so-called apostolic traditions which are supposed to

¹ The illustrations are reproduced from Ernst Maass, *Orpheus*.

have been established in the second century A. D., but may, in part, reach back to the earliest days of Christianity. As the Gospels in the shape in which we have them are later than the Epistles of St. Paul, the theologians of the critical school deem it probable that the Gospel accounts of the institution of the Lord's Supper are influenced by St. Paul's views. Mark (whom Luke and Matthew follow almost literally) describes the institution of the Lord's Supper as follows :

"And as they did eat, Jesus took bread, and blessed, and brake it, and gave to them, and said, Take, eat : this is my body.

"And he took the cup, and when he had given thanks, he gave it to them : and they all drank of it.

"And he said unto them, This is my blood of the New Testament, which is shed for many.

"Verily I say unto you, I will drink no more of the fruit of the vine, until that day that I drink it new in the kingdom of God." (Mark xiv. 22-25.)

As to the use of the drink we shall notice on a careful perusal of the passages in question that Paul, as well as the Gospel writers, carefully avoids any definite designation, but speaks of the cup only, which, according to Paul's testimony, Jesus called "the cup of the New Testament in my blood."

Justin (at least in those MSS. from which most of the present text-editions have been made) speaks of water and wine, and at present pure wine is used in the sacrament. But we know that the oldest churches were not limited to a definite drink, but frequently used water. It was only with the consolidation of the Church under Roman influences and when its institutions assumed a definite shape that the nature of the drink was officially prescribed by ecclesiastical authorities to be a mixture of wine and water which was later on changed to pure wine, and those congregations who did not obey were ostracised as heretics.

Professor Harnack's Essay on Bread and Water¹ contains irrefutable evidence that the elements of the sacrament were not definitely determined among the early Christians. Even as late

¹ Published in *Texte und Untersuchungen zur Gesch. der Altchr. Literatur* VII, 2 pp. 115-144.

as the fifth century many Christian congregations celebrated the Eucharist by partaking of bread and water alone. Not only did the Ebionites and other sects of ascetic tendencies abstain from wine in the sacrament, but we know positively from the sixty-third letter of Cyprian that the Catholic Churches of Africa clung to the same practice and African bishops are quoted as claiming in their favor (1) the authority of the scriptures, (2) the commendability of the practice and (3) tradition. We must remember that the wine as the drink of the Lord's Supper is nowhere explicitly mentioned in the New Testament, and St. Paul, apparently not without some good reason, uses the non-committal term *ποτήριον* (drink), when we should expect the word "wine." Cyprian's condemnation of the use of water as a heretical practice and the weakness of his arguments are the best proof that the African tradition was neither isolated nor limited to ascetic circles, but based upon an old and well established authority. Professor Harnack believes according to the Gospel report, that Jesus at his last supper drank wine and not water, but he claims that water was the usual and preferred drink of the Lord's Supper among the early Christians which can be established on the authority of Justin the Martyr who never speaks of the wine of the sacrament, and once speaking of the water of the mysteries directly identifies it (*ὕδωρ πιστόν*) with the Eucharist cup.

Further whenever Justin mentions the blessing of Juda, where Juda is compared to a vine, or to the fruit of the vine, the grape, or where he compares Christ with Dionysus, the God of wine, he never mentions the Eucharist.

The reading *ὄνος* in two passages of the latter kind is a corruption of the text for *δῖνος*. Thus the fact that both Dionysus and Christ make their entry on a donkey is more striking to Justin than the symbolic significance of the wine in both religions. In three other passages the words *ὄνος*, wine and *κράμα* mixed drink, appear by the side of the terms "bread and water," but they are

¹ For further details we refer the reader to Professor Harnack's essay "Bread and Water the eucharist elements of Justin." Hinrich'sche Buchhandlung. 1891. In *Texte und Untersuchungen*, VII, 2.

spurious as they do not appear in the Ottabian codex. Obviously (Professor Harnack argues) later interpolators or copyists took offense at the expression "bread and water" and deemed it necessary to add the word "wine" or "mixture" (οἶνος or κραμα). Professor Harnack concludes (p. 131).

"Justin describes the Christian worship as using in the Lord's Supper bread and water not bread and wine. His disciple Tābian accordingly did not introduce an innovation. And a few comments are needed to set forth the importance that Justin who was at home in Ephesus and Rome, and in fact in all Christendom, and who describes the worship of the Roman Church, makes no mention of the wine, and describes the ceremony as being of bread and water."

Harnack sums up his conclusion in these sentences:

"The institution of the Lord was originally understood in a sense which makes the blessing attach, not to bread and wine, but to eating and drinking. Bread and wine is a very simple meal, but bread and water is simpler still. The elements of the Lord's Supper, accordingly are bread and the cup.

"Paul says" *καλὸν τὸ μὴ φαγεῖν κρέα μὴδὲ πίνειν οἶνον* (i. e., it is good not to eat meat nor to drink wine), but it is a mean subterfuge to say that here the wine of the Lord's Supper must be excepted. . . If Paul praises abstinence from wine, he includes abstinence from wine at the Lord's Supper, and thus he declares that the cup of water is sufficient.

"The Lord's Supper in the circle of the first disciples was a daily and a real meal (Didache 10 uses the term *ἐμπληροθῆναι*, i. e., to eat one's fill), and probably bread and wine were used. But from the beginning the breaking and eating of the bread was the essential part, for it was a meal that was being celebrated. At the meal a drink was taken, and that was drank as the blood of Christ. This was (especially among the poor) sometimes water. Of the Ebionites of Palestine we know that they took bread and water as their sacrament and in addition to their lack of wine there was another reason. Even in the apostolic age there were some who made of wine drinking a matter of conscience, and Paul requested Christians to be lenient with such narrow consciences.

"Thus the custom of taking the Lord's Supper under the form of bread and water, as a real meal, increased from 64-150 A. D.; and became so well established that Justin in his description of the Lord's Supper makes no mention of wine at all.

"It is only the Apostolic Catholic Church which introduced the wine as the sole element of the institution; and in this case she was at least in formal agreement with Christ's inauguration."

Harnack adds:

"The Church had a right definitely to prescribe in times which no longer could brook liberty, the elements of the first Lord's Supper, especially when there

was a demand for water and when a motley variety of foods began to endanger the dignity of the ceremony. But this advance had its serious drawback for as soon as the elements were determined the superstition became unavoidable that the power of the sacraments was inherent in its elements."

We have quoted Professor Harnack extensively because of the importance of the results of his investigations, and we need not here quarrel with him about principles. He seems to think that in the first century the early Christians were entitled to have liberty, but later on the Church had a right to suppress the consciences because later ages could no longer brook liberty. Uniformity which was needed for the centralisation of the power of the Church became more essential than personal convictions. If in Paul's time the Christians were free to take either wine or water, why should we of the nineteenth century not have the same right. Some Chinese converts who hold the alcoholic drinks of the west in abomination use tea, but their practice is denounced as utterly un-Christian by the Episcopalians.¹

My friend, Dr. G., a member of the Church of England and a

¹ See, for instance, the missionary report in the little monthly *The Church in China*, Vol. IV., No. 12, pp. 149-150: "The *Angelus*, the parish paper of the 'Church of the Ascension in Chicago, published to the world that here was something very wrong indeed in China; the missionaries were using tea instead of wine in Holy Communion. Next, a professor of one of our theological seminaries wrote to the *Living Church* and restated the charge, and demanded 'the utmost publicity.' Two good friends of the Mission were prompt in denying the charge, but meanwhile the mischief is done. People who will never see the denial will hereafter refuse to contribute to the Mission on the ground that we are not to be trusted. One priest has even gone so far as to write that 'many may feel called upon to abjure the Communion of a Church where such things are allowed,' and quite a little excitement seems to have been caused in many quarters. Now we do not wish to make light of such a charge if it were true. To substitute anything whatever for the wine in the Sacrament would be to break with all Church tradition, to meddle presumptuously with the institution of our Lord, and thus to commit sacrilege. (!) If a priest or bishop were found to have done so he ought to be tried and deposed.

"But it is just because the offence is so grave that we ask our critics how they could find it in their hearts to impute it to the Bishops and clergy of the China Mission. On the one side is all Church law and custom and the character of the men who are sent out from home to do a difficult work. On the other, an ambiguous sentence in a letter of one man new to the work. Do not make our task harder by foolish criticism or harsh charges. Be a little just, and generous, and charitable."

vigorous anti-teetotaler, endorses these sentiments and declares that wine is under all circumstances the better drink.

Harnack seems to assume that Jesus instituted the Lord's Supper personally, but a close inspection of the Gospel reports will show that such is not the case.

In spite of Paul's and Justin's definite statements, that Jesus instituted the Lord's Supper on the night in which he was betrayed, Christian theologians have been forced to the conclusion that the event is not historical but the product of an interpretation of the Lord's Supper as an ancient Church institution which was commonly supposed to be founded by Jesus himself.

Paul's view of the Sacrament may have given the first stimulus to celebrate it in commemoration of his death, and is at any rate the oldest statement that is historically unobjectionable. The reports of the three Gospels are of a later date and may very well directly or indirectly be dependent on Paul. The strangest thing is that the Fourth Gospel (which is named after St. John) does not contain the least reference to the institution of the Eucharist; and yet the author of this Gospel, whose conception of Christ as the bread of life brings him into sympathy with the fundamental idea of the Lord's Supper, would have made him hail the idea of the Eucharist in which Christ symbolically gives himself up as food to those who are his own.

One of the most important differences between the three Synoptic Gospels and the Fourth Gospel consists in this, that Christ was crucified according to the former on a Saturday, according to the latter on a Friday; but a critical-textual investigation proves that the original reports agreed better than the versions which we now possess.

The high-priest and his councilors, according to Mark, are in a hurry to have Jesus executed before the Passover Feast, and then we read that Jesus celebrated the Passover with his disciples, and the account of it is so explicit as to leave no doubt. The contradiction finds its explanation in the idea which prevailed among the early Christians that the Sacrament was the Jewish passover or pascal, and Christ, the pascal lamb of the new Cove-

nant, should have instituted the Lord's Supper on the Feast of Passover. This thought pervades some passages which bear the characteristic marks of interpolations; and he who tampered with the text forgot to change the other passages according to which Jesus must have been crucified before the feast. The addition made to the text includes the celebration of the Last Supper, and the fact that we have to deal here with an interpolation must naturally discredit the three reports which in this very place have obviously been tampered with. If the institution of the Lord's Supper had been a part of the original Gospel of Mark or of any genuine apostolic memoir, the author of the Gospel according to St. John, who knew and used these oldest Gospels, would not have forgotten to incorporate it in his book.

Spitta, though recognising the great importance of Harnack's essay, criticises him for reconstructing the Last Supper from post-apostolic traditions and rejects the idea of its being instituted by Jesus at his last supper, saying :

"Of an institution (of the Lord's Supper) by Christ on the last day of his life, there is not the slightest trace in the oldest tradition." (P. 332.)

Spitta¹ proposes for practical Church use the interpretation of the Lord's Supper in the sense of Christ's word, *ἐγώ εἰμι ὁ ἄρτος τῆς ζωῆς*,—I am the bread of life,—and would thus replace the gloomy and funereal mode of its celebration by a more elevating conception, not as a *mysterium tremendum*, but as a feast of joy and gratitude. And this conclusion is forced on him—a man of decidedly conservative, if not orthodox, tendencies—against his previous conviction upon purely historical evidence and the internal evidence of the text.

We cannot enter into further details and refer the reader to Professor Spitta's thoughtful article on the subject, which is the work of an orthodox Christian, i. e., of an ardent believer, a theological professor of the University of Strassburg, who takes a very active part in practical Church work. His present view has been

¹ *Zur Geschichte und Literatur des Urchristenthums*, p. 208.

forced on him by the overwhelming evidence of facts. He says of his own views:

"The following essay contains a severe self-criticism. What I offer is nothing else than the result of that which the power of historical tradition as well as I understand it has forced upon me."

In addition to historical reasons, which render the view that the Lord's Supper was instituted by Jesus impossible, there are other arguments which should not be underrated. The Christians of to-day are accustomed to the words, "This is my body," and "This is my blood"; but to the Apostles these terms were strange. Nor did Jesus prepare them otherwise than by the prophecy of his death. This, however, aggravates the situation and renders the words the more offensive, ghastly, and abhorrent.

Consider only the situation: The revered Master takes leave, because he must die, and he declares in the last meal that the bread which he breaks and offers to his disciples is his body, his very flesh, and the wine his blood. The impossibility of such a declaration at such a moment is obvious! The very idea of identifying the bread with the Lord's flesh that will be broken on the cross, would under these circumstances have been so uncanny as to make his disciples unable to swallow the least morsel of it. The audience of Jesus did not consist of cannibals of ancient Egypt or darkest Africa, but of Jews. The wine as blood, not for sprinkling but for drinking, would have become disgusting to Israelites who through the Mosaic law had become accustomed to regard the drinking of blood as a most sinful defilement.

THE INFLUENCE OF ST. PAUL'S CONCEPTION.

If the Gospel report of the institution of the Lord's Supper must be ruled out of court, we find ourselves at last face to face with the statement of St. Paul that he received it "as a word of the Lord." His is the only testimony the historical genuineness of which cannot be doubted. But even if we suppose that Paul had actually received the institution of the Lord's Supper by a vision-like communication, we cannot help thinking that the conception of his intuition must have come to him from somewhere.

Owing to the authority which Paul possessed, his mode of celebrating the Eucharist must have at once been widely introduced among the Gentile Christians, and must have done much toward determining the spirit, and perhaps even the form, in which it was celebrated.

St. Paul is a thinker of great depth, but he is neither an historian nor a critic; he is a theologian who takes convictions which are to him of fundamental importance as revelations and proclaims them as words of the Lord. How little he cares for historical information concerning Jesus appears from the fact that he intentionally avoided the Apostles for a long time, and goes so far as to boast:

"I certify you, brethren, that the gospel which was preached of me is not after man."

Only when his views had been definitely settled, Paul sought the Apostles for their indorsement of his doctrines. Peter and Paul did not agree, but Peter suffered Paul so long as he confined himself to the Gentiles and promised to remember the poor.

The way in which Paul proclaims his conviction as a word of the Lord is very impressive, but we must consider that on other occasions he is very unfortunate with his statements. An essential part of St. Paul's Christianity was the doctrine of the day of the Lord as being near at hand; and the faithful believers expected to be literally taken up to the heavens at the advent of Christ. Their faith began to be shaken when several of them died before the fulfilment of their hopes and to comfort the survivors St. Paul pronounces the prophecy:

"For this we say unto you by the word of the Lord, that we which are alive and remain unto the coming of the Lord shall not prevent them which are asleep.

"For the Lord himself shall descend from heaven with a shout, with the voice of the archangel, and with the trump of God: and the dead in Christ shall rise first.

"Then we which are alive and remain shall be caught up together with them in the clouds to meet the Lord in the air: and so shall we ever be with the Lord.

"Wherefore comfort one another with these words."

No quibbling can set this prophecy in a light which could interpret away its non-fulfilment, or soften the crudity of his escha-

tology. And this promise St. Paul made to his followers as a word of the Lord!

St. Paul is a peculiar mixture of clear thought and mysticism. He is clear in his arguments and explicit in his statements, and those convictions which he holds for reasons unknown to himself appear to him as direct communications of a higher source.

The psychology of St. Paul is not an exception but the rule. Convictions which rest on sentiments are commonly regarded as divine, and any literature which is a direct outpouring of the heart, be it poetical or religious, is considered as inspired. Thus when Paul makes a certain statement as a word of the Lord, we must assume that the source of his conviction is an inner voice which wells up, in the same manner as does conscience, out of the depths of his unconscious soul-life.

We have explained in another article that Gnosticism (using here the term in its broadest significance) was a religious movement antedating Christianity and that Paul was thoroughly imbued with its spirit. He employs the gnostic terms not as denoting new ideas but as referring to well known notions. His education was Jewish of the most orthodox school, but it was modified by the spirit of his surroundings which as we know were saturated with Greek thoughts such as prevailed in those days in Asia Minor; and Asia Minor was a hotbed of Gnosticism.

By Gnosticism in its broadest sense we do not understand any one of its special systems, be it the system of the Ophites or any other Gnostic sect, but the whole fermentation which through the mingling of the nations and the mutual exchange of thought began to agitate the religious world from the days of Alexander the Great. It is not the place here to analyse the problems which were raised in those days and to assign them to their various sources, India, Persia, Egypt and also to the ancient traditions of Babylon, Assyria, and Accad. Suffice it here to state that new ideas concerning the nature of the soul, its relation to God, and its destiny after death were discussed and many wild theories as to the origin of the world and the end of all things with a subsequent renewal were widely entertained by many people. A saviour was expected, not by the Jews alone,

but by almost all the nations, especially by the Persians. Paul had unconsciously imbibed all these notions. How could he, growing up as he did in Tarsus, help it? You might as well educate a German boy in America, and expect him to remain ignorant of the American spirit and the notions of progress and liberty with which the atmosphere of the United States is saturated. Thus we may fairly assume that Paul cherished a great number of thoughts of which he could give no account to himself because he had imbibed them in his early childhood.

Have we perhaps to deal with such a notion in Paul's doctrine of the Sacrament?

The question is difficult to decide, but there is one thing of which we may be sure, viz., that similar ideas were prevalent among various religious sects, among which the Mithras worshippers perhaps come most closely to Paul's conception of the sacrament. The Myazda offering was frequently celebrated in commemoration of the dead and taken as food of life which would assure its participants of their resurrection at the great day of judgment. When Mazdaism spread, Mithras worship became more and more prominent, and we may assume that it incorporated many religious notions of the less civilised people who adopted its faith. Was it not natural that the idea of the power of atonement inherent in the blood of sacrifices should be connected with the Myazda offerings? Such notions prevailed among all the races of Asia and Africa as well as among the Gauls and Thracians and had entered into the sphere of Greek thought through the Dionysian and other mysteries. The monuments of the Mithras mysteries which are frequently found in the northern Roman border-provinces along the Rhine and the Danube can be adduced as unequivocal evidence of the rôle which the idea of blood as the sacred liquid of salvation played in the Mithraistic eucharist.

Blood covenants are an established institution among all the pre-Christian religions of the earth, and the idea of their sacredness was deeply rooted in the hearts of the people.¹ Blood cove-

¹ See *The Blood Covenant, a Primitive Rite and Its Bearings on Scripture*, by H. Clay Trumbull, D. D. London, George Redway, 1887.

nants are survivals of barbarism, but to Jews and Christians both the idea itself and the term were sanctified through scriptural use. For we read in Exodus xxiv. 8:

"And Moses took the blood, and sprinkled it on the people, and said, Behold the blood of the covenant, which the Lord hath made with you concerning all these words."

It is but natural that the idea of the blood covenant formed an ingredient of the gnostic fermentation of thought; and it seems that the hoary traditions of human sacrifices, as well as the vicarious death and resurrection of a Dionysus, an Adonis, a Thammuz were connected with the practice of blood covenants. The principle of vicarious atonement is the underlying theory of all sacrifice as instanced in the practice of the Mosaic law of transferring the sins of the people upon the goat offered on the altar.

A new conception of the idea of sacrifices were in the air and cannot have remained unknown to Paul. When his whole life was suddenly changed through the vision on the road to Damascus, he saw the world in a new light, and his gnostic notions began to receive a satisfactory interpretation. They must have remained an unintelligible portion of his soul, which may have collided now and then with the system of his pharisaic schooling. But when he conceived the idea of the Messiah as having appeared in the flesh and having died in contumely and as being resurrected in glory, the two currents of his thought were reconciled, and the dim traditions of ruder ages, the mysterious notions of unknown sources, appeared now as prophecies that had found their fulfilment. Paul must have felt the more sure of having the right solution as the most ancient, the most venerable, the most reliable, though at the same time the most bloody and cruel and desperate methods of salvation were thus justified in principle, while the rites themselves which (perhaps not without serious misgivings among a large portion of the most earnest religious minds) had become antiquated, could now at last be regarded as fulfilled in, and finally abolished by, the death of Jesus.

Considering the religious disposition of mankind, the belief in the atonement through the blood of Jesus was a doctrine that could

set to rest the minds of the people and serve as a transition to a nobler conception of religion. It developed spontaneously, being a natural product of the age, and if Paul had not proclaimed it, some one else might have uttered a similar thought. It was a matter of historical necessity that he who formulated it should become the religious leader of the age.

If in the progress of civilisation the development of thought rises to a higher plane it will discard the lower religions that prevail at that age, for a higher religion; but let us not forget that this higher religion, in order to be acceptable to the people should not only be better, purer, and truer, but must also come as a fulfilment of the older faith. The Christianity of Christ came as a fulfilment of the Old Testament, and the Gentile Christianity of the Roman Church, in order to be acceptable to the Pagans, could not help being a fulfilment of ancient Pagan rituals and beliefs. From the Protestant standpoint the development of the Christian Church during its Romanisation appears as a falling from grace and a lamentable lapse into Paganism, but from the standpoint of a calm historian who is not swayed by sentiment and endeavors to understand historical events, this period appears as the unavoidable result of given conditions. It was a necessary period in the evolution of religious thought and could not have been otherwise.

The task of preparing the movement fell to the part of a Hellenised Jew, which is not an accident but a matter of course. The apostle of the new covenant might as well have come from Egypt as from Asia Minor. Philo, if he had lived a decade later, might have done the work as well; but at any rate, it was essential that it should be a Jew born and raised in a centre of the intellectual life of orientalised Hellenism, so as to unite in himself all the premises of the religious problem of the age. Judaism alone could become the centre of the new faith that was to be the result of the Gnostic fermentations, because the Jews were a nation in possession of an accessible religious literature chastened in the furnace of a pure and almost Puritanic monotheism. Judaism alone could furnish the backbone of the new faith. Neither the Egyptian Thoth, nor any of the Greek saviours, Dionysus, Hermes, Hercu-

les, etc., nor the philosopher among healers, Apollonius of Tyana, nor even Mithras, had any chance in this competition for the place of honor, with the Jew Jesus, the simple-minded Nazaree, whose Messianic mission became sanctified by his death on the cross, for thus the new religion was set in relation to the ancient traditions of atonement by blood in a real human sacrifice. The Gospel of the Crucified was a fulfilment of the old beliefs as awful and soul-stirring as the cruelest of them, yet implying a radical abolition of the barbarism of bloody sacrifices.

EDITOR.

DUALISM MODERNISED.

DUALISM is the earliest metaphysic. In tribal society it is the universal belief, and even in modern society the mass of mankind adhere to it. A system of dualism had not been formulated to harmonise with the new concepts of science, although it is assumed by a multitude of writers, until Professor Ladd as a physiologist, especially of the nervous system, now presents a theory purporting to be derived from the teachings of modern psychophysiology.

Ancient philosophy inherited a doctrine of ghosts from barbarism. This doctrine science has called animism. In this notion of the constitution of the world all bodies are divided into two classes, material bodies and ghostly bodies. It is supposed that the two classes have independent existence. Material bodies have a distinctly observable existence: they can be tasted, they can be touched, they can be felt as pressures, they can be distinctly heard—that is, they can be plainly revealed to the senses, but they are inert and unconscious. On the other hand ghostly bodies have mysterious existences. Ordinarily they cannot be tasted, touched, heard, and seen, but there is a peculiar class of people who under peculiar conditions may have communication with them, and ghosts are living, conscious bodies. They are supposed to live in a hazy or cloudy condition and are hence often called spectres. These spectral bodies can become domiciled in material bodies. In sleep they go forth from their homes and live a magical existence, travelling as thought wanders from object to object and from place to place. As material bodies are inert the life of material bodies be-

longs to their ghostly inhabitants. As material bodies have not mind, only their ghostly inhabitants are possessed of mind. The manifestation of life and mind which seems to inhere in some material bodies, is, in fact, to be attributed to the ghostly inhabitants. The class of persons to whose senses ghosts are revealed can communicate with them and learn about the mystery of the world, and the ghosts of these persons may even leave their own bodies and travel at will. How this doctrine originated has become an object of scientific research, and it is already explained. This is the original theory of dualism which has been modified in modern times.

The modern doctrine of dualism makes a radical and in many respects a just distinction between animate and inanimate nature; only animate bodies have ghosts. Sometimes a distinction is made between human bodies and other animal bodies, and only human bodies are believed to have ghosts; though it is not common to distinguish between the lower animals and man in this manner. Usually the distinction is covered up in a haze of speculation, or else it is wholly ignored.

Thus, Ladd in his new theory of evolution distinguishes between things and selves; but it is not clear whether by selves he means human beings only or all animate beings.

A few years ago a society was organised, known as the Society for Psychical Research, the purpose of which seems to be to investigate the subject of ghosts. The outcome of these "researches" seems to be the abandonment of the ghost theory and the substitution of a physical theory of telepathy, by which men are supposed to communicate with one another without contact direct or through a medium; especially is it desired to establish the doctrine that dying persons may communicate with distant friends and relatives. So the ghost theory vanishes in telepathy! On the other hand scientific investigation, especially in psycho-physiology, is active and searching; and scientific men are reaching the conclusion that all matter has the property of consciousness.

That affinity is choice has long been taught in chemistry, although it has been controverted or rather ignored by many chemists. Where there is choice there must be consciousness as its

foundation; the choice is relative to some other with which the choice of association is made, and the choice of association must have its foundation or absolute in consciousness. This is the legitimate outcome of the last twenty years of research.

That affinity is conscious choice is now more thoroughly established than ever before. Ladd himself, the latest scholar to propound a system of dualistic theory, or doctrine of ghosts, seems to adopt this conclusion. A decade ago it was announced in a very thoughtful and able work by Professor Johnson of the Harvard school of Theology. The doctrine is springing up on every hand among scholars in psychology and physiology.

This doctrine must not be interpreted to mean that all rocks and plants are animals, but only that there exists in rocks and plants something which when properly organised for the purpose appears in animate bodies. There is a something in all matter which, when duly organised, will exhibit those characteristics of animals which we call mind.

In the history of ancient philosophy there may be found vestiges of a notion which has come to be known as hylozoism. It is the doctrine that all matter has mind. It seems to have been entertained by some men for more than twenty centuries, but it has never been accepted as having a scientific foundation. The distinction between the animate and the inanimate seems to be too plainly made in nature to warrant its general acceptance. Still in some qualified way it has been revived and restated from time to time by a few of the greatest scientific men and by a few of the greatest philosophers.

Professor Ladd adopts the hylozoistic theory, but rejects the term matter and proposes to use the term nature. By this course he avoids the *odium theologicum* under which the term materialism has fallen, though he seems still to retain the dualistic theory of material bodies and ghosts. I say seems, although in fact he makes a strong and valid argument for the unification of spirit with the other properties of matter in every body and particle of the universe. Hylozoism has been rejected by science, and can no longer be entertained in the sense in which it has been held from ancient

times up to modern physiologic and psychologic science. Hylozoism, as the name implies, is a theory that all bodies are animals. This of course is absurd. But it remains to be considered whether all bodies are spiritual or not. In this form modern science is coming to recognise that all matter is spiritual. Science has from time to time affirmed that all matter contains all of the properties necessary to explain the existence of all of the bodies of the universe, and even those metaphysicians who have devoted especial attention to the sciences which are embraced under the general term natural history have sometimes affirmed the same doctrine—as when Schelling says that “Matter is the general seed corn of the universe, wherein everything is involved that is brought forth in subsequent evolution.” This is the doctrine of science, as Ladd recognises, for he quotes from Tyndall with approval:

“Suppose, then, that the student of nature, ‘abandoning all disguise’ and ‘prolonging the vision backward across the boundary of experimental evidence,’ discerns in ‘that matter which we, in our ignorance and notwithstanding our professed reverence for its creator, have hitherto covered with opprobrium, the promise and potency of every form and quality of life.’ . . . ‘If life and thought be the very flower of matter and force, any definition which omits life and thought must be inadequate, if not untrue.’ ”

Bear with me while I still further explain the relation of affinity as consciousness and choice to organised mind. Organisation is the same thing as incorporation. We speak of organisation when we consider the organs severally, we speak of incorporation when we speak of the organs conjointly, just as we speak of space when we consider particles severally and of form when we speak of particles conjointly. Molecules are organised as numbers; minerals composed of molecules are also organised as forms. Geological formations or rocks which are organised as forms are also organised as forces. Plants which are organised as forces are also organised as causes, so that the antecedent parent is like the consequent offspring. Animals, being organised as causes like plants, are also organised as minds. Thus animals are organised not only as molecules but as minerals, as formations, as forces and as plants, and also as psychic beings. These are the discrete degrees of organi-

sation which may be observed in the bodies of nature. We cannot understand science unless we understand that there are degrees of organisation. I reject hylozoism because I deny that molecules, minerals, formations, and plants are organised as animals, and yet I believe that every particle in the animal's body has unity, extension, speed, persistence, and consciousness; and as particles have these absolutes, they also have their relatives.

Every organised body of the universe is one in many: it has extension and position, it has speed and path, it has persistence and change, and it has consciousness and choice; for plurality is the relative of unity, position is the relative of extension, path is the relative of speed, change is the relative of persistence, and finally choice is the relative of consciousness. Animal body is distinguished from all other bodies in that it is organised upon a plan through which all of its properties are operated. I do not confound animals with other bodies; this is hylozoism. I recognise the distinction between animals and other bodies, but I do not deny that the particles of other bodies have all the essentials found in animals.

All bodies are organised in respect to purposes, but some operate in a different manner from others. In some the purposes are more restricted than in others. Molecules are restricted in their organisation to operate as kinds; minerals are restricted in their organisation to operate as kinds and forms; formations are restricted in their organisation to operate as kinds, forms and forces; plants are restricted in organisation to operate as kinds, forms, forces, and causations; but animals are organised to operate as kinds, forms, forces, causes, and also as concepts. The restriction of an organisation to one function is easily understood. We may organise a society for mutual discussion, then we may further organise for research in the subject which we discuss, then we may still further organise it for the purpose of diffusing the results of the research.

In all animal bodies there is a five-fold organisation which is well developed and exhibited in the human body. First, there is metabolic organisation for the chemical preparation of the food.

This organisation is in itself a system of many organs. Every member of this system is composed of subordinate organs that perform all of the five-fold functions. The stomach, one of the organs of metabolism, is permeated with organs of circulation; it is supplied with organs of muscular activity; it is supplied with organs of reproduction, for the stomach is forever in process of reproduction. It is also supplied with organs of mind, for it is bountifully furnished with nervous elements.

The five-fold organs of metabolism, of circulation, of muscular action, of reproduction, and of nervous function, are also every one compound organs for all of the five properties with which matter is endowed. It is because of this complete organisation that animals differ from all other bodies of the universe. Plants have organs for chemical operations, organs for form operations, organs for force operations, and organs for operations of causation, or as we call them, for reproduction; but they have no organs of mind: hence the discrete degree of organisation which separates animals from plants. Yet the ultimate particles of the plants have all the essentials.

Geologic formations or rocks have organs of chemism, for they are composed of molecules. They have organs of form, for they are composed of minerals. They are organs of force, because they carry on geologic operations; but they have no organs for reproducing themselves, so that causations are not organised to produce hereditary successions as in plants; and yet every particle of rock has all of the five essentials of matter, as unity, extension, speed, persistence, and consciousness. All rock bodies are organised in three discrete degrees, all plants in four discrete degrees, and all animals in five discrete degrees. Thus the doctrine of hylozoism is not valid, but the doctrine of the consciousness of all matter is valid. The same particle of matter which is the constituent of a rock to-day may be a constituent of a plant to-morrow, or it may be the constituent of an animal the next day. The five-fold essentials of matter are universal, but the five-fold organisation of matter is not universal.

Dualism is the modern and metaphysical explanation of the

ghost theory in which the spiritual element of animal bodies, or at least of human bodies, is held to exist as an independent body. It therefore teaches that there are material bodies and ghostly bodies. Modern science teaches that the spiritual element in man as in all other animal bodies is an essential of all bodies, but that it is organised only in the animal body, and is immeasurably more highly organised in the human body than in the lower animal. It teaches that mind is organised consciousness, and until this organisation is secured there is no mind, but only consciousness. The ghost theory is a superstition which remains over from savagery as a vestigial opinion.

A great difference between the author and modern dualists consists in the method of identifying the psychic principle with something already well known to science. Professor Ladd, for instance, who is as good an exponent of dualism as any one of them, identifies the soul with will and ultimately with force; we identify it with self-consciousness (as awareness of self) and with choice, and consider it to be the same thing as that of which science treats under the term affinity when consciousness acts in choice.

Read in modern physiology the account which science gives of the unicellular organisms of the blood, and you will find that the functions of these organisms cannot be described without assuming that they have consciousness and choice.

The new dualism, like its progenitor, animism, lays great stress upon the telism of nature, which is the manifestation of design in the universe. This telism is assumed, illustrated, and proved by the modern science of evolution; but the telism of dualism is metaphysical, while the telism of science is altogether another affair.

Evolution cannot be stated except in terms of telism. Evolution must recognise organisation, and all organisation accomplishes a purpose. Scientific men are forever explaining how purposes are subserved by organisation. No matter what the philosophy or the metaphysic of a naturalist may be, whenever he comes to discuss an organ he explains the purpose for which it is used, the advantage which accrues from its use, and its survival by reason of this advantage. Purpose is discovered everywhere in nature, but

especially in plants and animals does it constitute the theme of all modern science on these subjects. That the telism taught by modern science differs radically from the telism of metaphysic, we must now set forth.

A little river empties into Lake Michigan where now the city of Chicago stands; this river furnished a harbor for vessels to some of the pioneers of the west. The river was thus used by them for a purpose. On its bank a trader founded a mart. Thus the site of Chicago was established in a purpose which did not contemplate the building of the present city. The traffic gathered about it a few settlers who required protection, and a fort was built; yet there was no plan devised to build the great city.

At last the village grew to be a well-to-do town where goods were landed from vessels that sailed the lakes and sold and distributed to the south and west, far and wide, and the purposes of thousands of men were subserved in the building of the city. These purposes were innumerable multifarious, arising severally during every moment in the history of every man who took part in supplying the wants of the people, or who took part in receiving supplies for their wants.

The site of the town was a swamp, but when the people became numerous and much wealth was accumulated they raised the city out of the mud. None of the founders anticipated the necessity for this action; yet it was due to the purpose of the city government. Highways were built to the city and railroads were constructed from the city and when the people became many and were scattered over an expansive district rapid transit became necessary, and thus street railways were constructed, not to build the city but for gain in traffic. In the meantime parks were laid out and the city beautified; later an exposition was held, and the exposition gave a boom to real estate, though the purpose of the builders was gain. Then came a temporary crash in values, but still the city grew with renewed strength, and already a great metropolis has been constructed. All of this has been accomplished in the pursuit of human purpose, but the city was not the purpose of any one man but of millions of men, and it was a purpose that did not look

to the construction of the metropolis as it is to-day, nor do the striving millions in Chicago or the hundreds of millions who co-operate with them have in view the creation of the city which may stand there a hundred years from to-day.

Surely Chicago has been built by purposive action, notwithstanding it has been once largely destroyed by mechanical action. But who is so foolish as to claim that the purpose existed in the mind of the trader who built his cabin there, or in the minds of the people who have inhabited Chicago, or of the people who have co-operated with them from without? Chicago of to-day is the accomplishment of the purposes of many men. It is in this sense only that final purpose can be asserted of the building of Chicago. The working of the purpose of the many through innumerable or infinite acts brought the final result; in this sense and in this only can we speak of a final purpose in the world of art. But if we claim foreknowledge for this purpose every man who understands the claim will deny it.

All incorporation is thus purposive, and this I believe is taught by the modern science of evolution at the present time, though many of its cultivators have not risen to the concept; but that anywhere in nature there exists anybody or has existed anybody with the foreknowledge of the present outcome of evolution I deny. There is no molecule, there is no star, there is no rock, there is no plant, and there is no animal, which exists or which has existed with this knowledge.

There was never in the mind of any individual a design for the city of Chicago. There has never been an *a priori* plan for its construction, but its plan has been a growth by minute increment of purpose in the minds of a multitude of men, every one expressing a multitude of purposes by multitudinous acts of will. Purpose itself is subject to evolution.

We look upon the organisation of the human body as a result of teleologic cause, but do not believe that an *a priori* plan was made by which this incorporation was developed through mechanical external contrivances. We hold that the human body has been developed by increments of purpose inhering in every particle of

every human being that has existed on the earth, together with every particle of every lower animal that has existed on the earth, together with every particle of every rock that has existed on the earth, together with every particle of every star in the universe, together with every molecule that has existed in the universe, together with every particle of ether in the universe. All of these bodies and particles have co-operated in making the human body, and their co-operation has been accomplished through telic causation; but there has never been any natural particle or body as an individual to plan the entire structure of man, nor has there ever been an *a priori* plan for it in nature. The plan of his structure is known even yet imperfectly by a *posteriori* cognition. The purposive actions of all other particles of the universe have co-operated with all the purposive actions of the human race to produce the human body. In a plan for a work of art, as the building of a steam engine, the construction of a railway, or the building of a city, we see much of a *priori* design, together with more of incremental purpose. In the structure of the human body we find little or nothing of a *priori* design but much of incremental purpose; while in the plant and in the crystal only incremental purpose can be discovered. The reason for this is found in the fact that self-consciousness and choice are but affinity, that they still inhere only in the particles constituting the bodies, because there is yet no organisation of mind. Mind must have organs of thought that design for the future may be planned; and that designs may be made, there must be memory of the past. When we consider the past and compare it with the present, then only can we make designs for the future. All of this mental activity is not found in other bodies than those of animate life. Animal bodies have mind, other bodies do not have mind, but other bodies do have self-consciousness and choice. A belief that inanimate bodies have mind is the real hylozoism, and that form of anthropomorphism science repudiates.

It is perhaps impossible to discover whether Ladd embraces a teleology which is a growth by minute increments without an *a priori* plan of the final results, or a teleology which assumes an *a priori*

design. A later chapter implies that he believes in this metaphysical teleology.

Professor Ladd discusses spheres of reality. Perchance I do not understand the meaning of his argument, though I have tried hard to unlock its treasure-vault of thought; reading it again and again for this purpose. What does he mean by spheres of reality? When metaphysical speculation was born, men spoke of spheres of space, because they believed the earth to be encompassed by hollow revolving spheres in which the heavenly bodies were supposed to be set; they thus accounted for the apparent motion of the celestial orbs. What is the thought which the author symbolises by this figure of speech? At first blush I thought that he designs to set forth the distinction between the teleology of affinity, the teleology of animality, and the teleology of man; but ere the chapter was completely read I found, or supposed I found, that the purpose of the chapter is to develop the concept of an animate universe as an individual existence.

He represents the cosmos as a human being of all-embracing proportions. We must remember here that it is his habit to call human beings selves, though sometimes he seems to call all animate beings selves. I believe that I have rightly interpreted the teachings of this chapter as an effort to develop the concept of a cosmical self, but the course of the argument is strangely metaphysical as I use that term. In what way it is metaphysical I may not take the time of my reader to explain fully, but I will give some of the characteristics of this method of dialectic, or reasoning with words instead of ideas. He uses the term absolute self, meaning thereby a cosmical human being, and then raises the question whether the noun and the adjective can be taken together, that is, whether the meaning of the adjective does not contradict the meaning of the noun.

The term absolute in metaphysical dialectics is used with three very distinct meanings:

First, it has the meaning of perfect or pure, as when we say perfect or absolute alcohol. We might thus call pure wine absolute wine, and it is common to say that pure truth is absolute truth.

The second meaning inheres in its use when affirming that something is absolute in itself, which is also relative to others. In H_2O the H_2 is absolute in itself and the O is absolute in itself, but in the molecule of water represented by them both there is a relation between H_2 and O . Thus in the water H_2 and O are both absolute and relative. Science in all its departments deals with this absolute.

Metaphysic has a third absolute. When properties or qualities are considered as independent existences or when relations are supposed to exist independent of their terms, and a mythology is created of abstractions, then the notion of a pure or unrelated absolute is entertained. This is the absolute in the exclusive possession of metaphysic.

Thus metaphysic entertains three meanings for the term absolute and confounds them as one. In a metaphysical argument it is always impossible to determine with which meaning the term is used.

Then he uses the term consciousness with two meanings combined. Consciousness means self-consciousness, or awareness of self; but the term has also come to be used in metaphysic as synonymous with cognition. There is always an element of self-consciousness, or awareness of self, in every act of cognition, because cognition is the interpretation of an objective manifestation received in a sense-impression by comparing it with a concept already existing in the mind. This is an inference, but the inference requires verification in order to be a true cognition.

Again, as I have already stated, our author often uses the term form to represent a space concept, as to express the relation of positions of extension in structure which also have figure or shape. He also uses the term form as a trope without realising that it is a trope. He speaks of the forms of motion and the forms of force and the forms of judgment and the forms of concepts and the forms of thought, although such forms cannot exist with the first meaning. He uses form in a generic sense as a trope to signify all of the properties of bodies, and in this sense he speaks of forms, laws, and purposes again and again.

The habit of figurative naming is common. Thus we call an old man grey-beard, and the Greeks called a squirrel a shade-tail. Such trope naming is common in all languages, and our author recognises this, but does not consistently make the discrimination in his use of words. In reasoning we should use terms with single meanings; the word should stand for one differentiated concept, and a concept should represent a real thing in nature or art.

This misuse of terms has long been recognised in logic, but never consistently avoided. It was followed in the logic of mathematics, until mathematicians came to speculate about space of n dimensions; for although equations involving n powers are legitimate, when we consider such terms as if they were dimensional terms of space we are indulging in metaphysic. He who reasons in terms with more than one meaning is lost in a maze of fallacies. This confusion is the characteristic of dialectic reasoning, or reasoning with words as distinct from reasoning with concepts, which considers a word in all its meanings as if these meanings were combined in one concept.

But may we not look upon the universe as being endowed with consciousness and choice? Is it not an individual; and is there not a possibility of its being mind?

It is a doctrine established by science that the world is one composed of many, that its extensions have structural positions, that its motions have systematic relations, that its times have causal relations, that its judgments have conceptual relations, and that it is thus an individual. That this individual, the cosmos, has such an individuality as to comprehend both the past and the future and to devise the whole course of evolution as an *a priori* plan, is a result only of metaphysical speculation, and science claims no share in the product.

Dualism like idealism and materialism rests on metaphysic. Metaphysic is a system of reifying properties. Idealism reifies mind and derives the other properties of matter from mind.

Materialism reifies force and derives the other properties of matter from force. Dualism, idealism and materialism are the three main systems of metaphysic, and they are blended in what I

propose to call modern dualism. Modern dualism supposes mind to be will, identifies will with force, and then reifies will as the substrate to which the other properties of matter are attached. It is an attempt to harmonize idealism with materialism; in so doing the new doctrine accepts the fallacies of both.

This tendency is apparent in all modern dualists, and we find it very pronounced in Professor Ladd. But in identifying force with will and making it the substrate of the world, Professor Ladd contradicts his own dictum that no category is completely dissolvable into any other.

The three systems of metaphysic alike invoke not only the unknown, but also the unknowable and the transcendental. They are forever in search of the occult. They do not make research for scientific reality, but make quest for some method of expressing reality as unknown, unknowable, and transcendental.

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EVOLUTION AND IMMORTALITY.

NO doctrine in a consistent theory of evolution¹ can be more important or more far-reaching in its consequences than the doctrine that life is never the peculiar endowment of certain separate individuals but is instead the affair of an indivisible universe. So conceived life necessarily includes intimately within itself—for otherwise the universe would be made divisible—all that is ever associated with human existence, it includes and unifies both the physical and the physiological, both the psychical and the spiritual parts of human nature, and being thus all-inclusive it frees the conception of immortality, which is our present interest, from any dependence on another nature than that about us, on separate unworldly souls or spirits. To comprehend it, however, and partic-

¹ The present paper is a sort of sequel to a paper: "Evolution Evolved—A Philosophical Criticism," published in *The Monist*, January, 1899, and like its predecessor it was also first read before the Catholepistemiad Club of the University of Michigan Faculty and the University of Michigan Philosophical Society. The two papers, moreover, I should like to have associated with the "Study of Immortality in Outline," published as an appendix to *Dynamic Idealism*, and with the *Philosophy of History*, which was issued last autumn, for in all of these investigations I have been trying to determine the precise relation of time to reality. In *Evolution Evolved* the attempt was to free evolution from certain encumbering inconsistencies that were clinging to it from the past, and my criticism was directed especially against an alien inorganic environment, an occultly endowed individual and a spontaneously generated life, referred to at the time as the three sides of an equilateral triangle. For evolution to retain any one of these veritable marks of creationism, even if it were retained in form or letter only, seemed to me to be a constant menace to consistency and the suggestion was made that in their place a consistent evolution should put an organic environment, an individual that lives not as an occult independent power but as an organic function or relation and a life that instead of being the peculiar sudden endowment of certain individuals more or less numerous, is the affair of an indivisible universe.

ularly to comprehend and appreciate the sort of immortality that it involves a careful and somewhat extended study has seemed necessary.

So I begin by saying that to make life the affair of an indivisible universe, that is, not only to deny individual independence or isolation to all living creatures but also to abandon such a classification of things in general as that of the animate and inanimate, is not by any means to ascribe life distributively to all things, including stones and clods. Some might hastily so conclude, but to such it need only be said that the term indivisible is to be taken seriously. *Nothing lives to itself alone but all things, "animate" or "inanimate," are the VITAL incidents of the life of the including whole.* This is undoubtedly a sweeping assertion, but it implies no new way of thinking, for what is here said of life in recognition of the first principles of evolution is being said also of other things. Physics is saying it of motion and force; psychology, of consciousness; and even ethics of will, and political theory of sovereignty. Force and consciousness and will and sovereignty are not the endowments of particular individuals, taken severally or taken in group, but are, all of them, affairs of an indivisible universe. No research of historical study can be more interesting or more illuminating than that which traces the sympathetic changes of view in the different fields of investigation. Thus, as of interest here, all along the lines of human inquiry, in the physical sciences and in the biological, in politics, in ethics, and in theology a divisible universe has been supplanted by an indivisible universe and an individual real through its own inner power by an individual real through its relationship. The atom in the sense of a material element is now but a word or at most only the symbol of what is recognised as imaginary or as only a logical disguise for reality, and souls—at least by the newer Christianity—are thought of no longer as so many immaterial entities but as the manifold yet never separate realities of a social, an organically social life. Citizenship, too, in the ideas of all, is coming to consist in function instead of in station, mere station alone constituting no social right. So is

individuality becoming transfigured; so is an indivisible whole claiming tribute from its parts.

But the technicalities of philosophy as so many rocks in our course are now close upon us. Technicalities, however, not less than rocks, are guides as well as dangers to progress. The two views, then, of individuality that have been touched upon, namely, the so-called pluralistic view which sees in individuals only so many separate independently existing entities, some of them material and some spiritual or immaterial, and the relationalistic view which identifies individuals with the differences of an organic life, are dualistic and monistic respectively. Dualism is only an abstraction or generalisation of the total absence of relationship that pluralism finds among its self-existent occultly endowed individuals. The separation of the individuals is so complete, the isolation so absolute, that no antithesis less thorough-going than that between matter and mind, the material and the immaterial, the real of one kind and the real of an absolutely different kind, can adequately express it. And monism is only an abstraction for the premise of relationism—or organicism?—that the very differences of individuals are essential to unity. Under monism, since different individuals are still always related and related in their own right, in virtue of their very differences, not through anything above them or apart from them, separation or negation can never be taken as meaning existence apart and different in kind; it can mean only that things exist not more in and through themselves than in and through what is other than they. Dualism makes the "other" of things always alien to them; monism makes it natural and even immanent. By way of illustration do but consider how a monist must regard such opposites as the human and the animal or non-human, the organic and the inorganic, the spiritual and the material. For him in any one of these cases either factor must be, as it were, a witness to something actual in the other, perhaps an exposure of something hidden, say even a lost memory or an unheeded prophecy. Certainly nature, so often set in antithesis to man, is a curious union or meeting of man's past and future. The animal, for example, seems to some to be "lower" than the human, and not only that,

but also to be quite different in kind, but it is really a sign, a direct sign, a visible token, that the human quite within itself is not yet all that it can be, that there is something higher already within it; or at least monism cannot but think this. So in general to the monist the negation or opposite of anything is a witness to the inner positive possibility of what we commonly call growth. Monism may repel some, but in any case it is attractive for this: it sees the earnest of growth in all negation, the presence of realised opportunity in all opposition.

We have, then, another basis of distinction between dualism and monism. Dualism, knowing no differences except such as isolate, can explain change or growth only as a result of creation, as a sudden appearance; but monism, seeing unity or relationship even in differences, identifies change with evolution. Thus, under the first, nature or anything that changes is subject to outside control and so either through miracle or through chance is lawless, but under the second instead of being subject to anything supernatural or external, whatever changes is its own superior or its own subject and so always consistent.

And now, to turn back, a nature that changes arbitrarily, that is subject to something above and beyond, is of necessity manifold and broken, being made up spatially of unrelated parts or elements and temporally of unconnected stages and materially of independent properties and forces, but a nature that is her own superior cannot but be indivisible, which is to say organic, both spatially and temporally one and continuous. In short, then, to make a philosopher's sum of the foregoing, pluralism and dualism and creationism are logically inseparable, and so are relationism and monism and evolution. It is important to remember this for what follows.

With the dualistic conception of immortality everybody is quite familiar, and everybody knows that it goes with a pluralistic view of reality, whether material or spiritual, the physical world being reducible to absolute elements and the spiritual to certain immaterial entities, and with a creationistic view of change. The plural in the sense of the divided and divisible—where the division

is physical or quantitative—is said to be mortal; it can and it often does disappear altogether; but the one, the indivisible, is immortal. Not that the immortal, which is also the immaterial, is not also plural, but its plurality is of a different kind; there are many immortal spirits, but—if I may borrow from the long ago—a wholly indefinite number of them can dance on the point of a needle. In short, then, for dualism mortality is sheer physical decomposition, and immortality, belonging to the physically indivisible, which cannot decompose, is literally another life, an after life, the life of a being that is different in kind from the being of space and time that lives here and now. As for the triumph over death which immortality implies, under dualism this can be only the extreme case, the abstract case of the lawless creative change that is always and everywhere taking place. Does some one interpose here and say that although a dualist, he has quite a different conception of immortality from what has been indicated? Probably he has, but it quite suffices to reply with a bit of the dogmatism of philosophy that a consistent dualist has no right to another conception and at least for the time being we are really courting consistency.

The monistic, which is also the relationalistic and evolutionary theory of immortality, is the view, as already suggested, which frees immortality from any dependence on another nature than that about us, on separate unworldly souls or spirits, on spirits that may be in the world but are not of the world, and with this view the present paper is chiefly concerned. Although the general standpoint upon which it depends is by no means far from the consciousness of our day, we cannot be said to be familiar with it. Perhaps it is one of the things which we are more or less ignorantly worshipping and which we greatly need to have declared unto us. Certainly under all the circumstances we cannot penetrate too deeply into the meaning of evolution; as thinkers we have no greater responsibility than that of the evolution-hypothesis; and then in the pulpit and out of the pulpit it is the common saying that Christianity needs to be more intelligently conscious of itself,

C.T.

and evolution may be, if it has not already been, the means to the needed awakening.

Monism, or evolution, finds in immortality, not an after life nor another life, but a fulfilling, wholly conserving continuance of the life that now possesses and encompasses us, asserting confidently that our immortality is, not is to be, and is in and of the very life we are here and now leading. In words that certainly are familiar: "Now is the accepted time; now is the day of salvation." And other words, other texts also suggest themselves: "The Kingdom of Heaven is at hand," and, "Lo, I am with you alway, even unto the end of the world." So, to say the least, Christianity can be interpreted monistically, and whatever the conventional consciousness of the day may be, it is at least questionable if a thoughtful student can arrive at any other interpretation. Moreover, without regard to any distinction between orthodoxy and liberalism, the pulpit everywhere is showing that it can be thoughtful as well as earnest.

Christianity, however, and its treasured message may be set aside for the present, and in order more fully and more clearly to comprehend the monistic and evolutionary view of immortality we must examine it objectively, that is to say, so far as possible independently of any emotional associations, and we can do this most successfully by an inquiry into the nature of such relatively unemotional facts in our experience as space and time and matter. Space and time and matter are unemotional only because they are commonplace or universal, and yet the commonplace or universal is at the very heart and center of experience. Thus, these three unemotional facts are important to us because they are so intimately involved in the universe's indivisibility, in the organic individuality, that an indivisible universe implies and that evolution and its related standpoints have for their foundation, and inquiries about them, being obviously equivalent to inquiries about the meaning of the yonder and the hereafter and the other, are naturally only part of a general inquiry into the meaning of immortality. Our first task, then, is the examination of space, time, and matter, and only when this has been accomplished shall we consider the

emotional value, the direct meaning to man's life, to his history and to his hope, of whatever we find.

At this writing it is not my intention to enter upon an elaborate metaphysical study of space, time, and matter, but still without great metaphysical subtlety, I would explain their relation to reality, risking illustrations—which not infrequently obscure—when-ever I can. So, for the present to waive any consideration of matter, the spatial and temporal is so commonly identified with the phenomenal, with the illusory or unreal, that to assert that space and time are intimate with reality, being veritable dimensions of reality, is probably to cause surprise, and yet to this view of their intimacy the thought of our day is surely committing itself. The spatial and temporal and the real are one. Every day we are getting farther and farther away from the mere antithesis of the spatial and spaceless or omnipresent, and of the temporal and timeless or eternal, and from the peculiar uses in physics as well as in theology to which these have been more or less consciously put. As a matter of course, however, with this change of view space and time themselves have assumed a new character, for they have actually taken the omnipresence and the timelessness, that were supposed to belong to something outside, quite into themselves. Thus specific location in space or in time no longer means isolation; rather it is relation, and in its dependence on relationship it gives a genuine omnipresence to every single position of space and a genuine eternity to every single moment of time, binding the parts of both together in indissoluble wholes. I know that the majority of mankind is disposed to think that there are certain constants or fixtures underlying experience and that space and time are among them, but herein they are at least in danger of erring seriously, for the constancy of space and time is very easily misunderstood. The history of mathematics shows space passing from the static thing of the old-time geometry to the dynamic thing of the modern calculus, and time from mere passive duration to a positive condition of motion. Statically it would be absurd to find omnipresence in every location and eternity in every moment, but dynamically such a finding is unavoidable. In fact our ideas of space and time have

changed very much as those of political territory and history have changed. What statesman to-day thinks of territory as only so much domain? More than ever before territory is so much natural resource and it is accordingly inseparable from the very life and activity of the people, so that instead of being a cause of separation from others it is a means to active union and co-operation. And what statesman thinks of history as only so much that has happened or is happening? In political life more than ever before both the past and the future are recognised as actually living in the present, since the very law that explains the past is made the motive, is recognised as the moving idea of the present. Territory, then, and history in the thought of our times are indivisible or—to describe them positively—they both have only such parts as are actively present in each other. Not statically, therefore, but actively or dynamically their parts are coextensive, each being at once local and omnipresent and at once momentary and eternal. This is a paradox, I know, but in general paradoxes are the highways of progressive thought, of thought that outruns its forms and traditions, and in particular no one would dispute me for an instant if I should say that all the peoples of the earth, though widely separated, are actually living within each others borders and adopting each other's histories. The life of humanity is differentiated but in none of its parts or expressions confined to special place or special moment; it is, to reminisce a little, not an endowment, not a peculiar possession here and there or now and then, but the affair of an indivisible whole, of a whole whose very parts, like the parts of an organism, in a sense that is perfectly genuine are coextensive and contemporary. Space and time, however, are only more general than territory and history; they are the territory and history, not of an organic human society, but of all that is; they are, as if incarnated, the very principles of territory and history; and mathematics to-day, as is generally known, in its conceptions of motion and force is finding the same omnipresence or active coextension of parts in space and the same contemporaneity in time. But a space of whose parts coextension or omnipresence is true and a time whose parts are contemporary are themselves spaceless and time-

less with the meaning that they are superior to limitations of mere distance and mere duration and in consequence they can be said to be intimate with reality.

For the sake of emphasis I must even repeat that what has been said about space and time would be meaningless as well as paradoxical apart from the dynamical as distinct from the statical point of view, just as the unity or indivisibility of territory and history was meaningless apart from the view of all humanity as a living organism. Indeed by reason of the intimacy or co-extension of their parts, an intimacy that the conception of infinity has disclosed to the scientist, both space and time are of organic character themselves. Mathematics has the habit of changing its views of figures by projecting them now on this plane, now on that, and analogously space and time are describable as projections. They are projections or say special transformations of the basal principle of organism, that differences and unity are essential to each other, upon separate planes.¹ All possible projections, however, can be only different views of one and the same thing and we cannot but conclude, what probably no one would dispute, that space and time or say coexistences and sequences are not only intimate with reality but also intimate with each other, each being a truth about the other, a visible token of something hidden in the other. For example the coexistences of space, being coextensive, must have some

¹In a note I may go a little deeper and suggest that space and time are projections of organism upon the two planes of unity and difference, or of mere being and mere change. The coexisting differences of space show the nature of the space-projection of organism, since space alone is materially empty or homogeneous. Coexisting differences cannot but be unsubstantial. For anything merely to *be*, or exist, different from anything else is for it to be in effect different only formally, not really. Differences of any greater degree requires more than sheer existence. Differences that are not indifferent require expression, movement, action. Hence the space-projection has its complement in the time-projection of organism. Reality, then, is neither spatial alone nor temporal alone, but spatial-and-temporal, and, to complete the circle, a reality that is spatial-and-temporal is organic. Hence, too, any thought of a separate material reality, of a matter that may be in space but is not of it, is wholly gratuitous, as is pointed out in a subsequent paragraph. Thought of a separate matter is necessary only when space and time are themselves without omnipresence or coextension and contemporaneity of their parts.

close relation to the sequences of time and the sequences of time, being contemporary, to the coexistences of space.

But illustrations, however dangerous, are now quite imperative, for without them I may seem to be lost in a wanton waste of unmeaning words. Only before turning to illustrations let me say that in a philosophy of evolution no problem can be more central than this of the relation of sequences and coexistences, and certainly no solution can be more suitable than the vital intimacy of the two which is here asserted. Indeed, the three intimacies which have been touched upon, that of the spatial and temporal with the real, that of all the parts of space or time with each other and that of space and time themselves, each with the other, being one and inseparable, are indispensable to an understanding of evolution.

Illustration of these intimacies, but particularly of that of sequence and co-existence, is in the fact, which is familiar to us or at least needs only mention to be recognised, that the different stages of any life-history are quite readily identified with coexisting phenomena or that the different stages of evolution as a whole are exemplified in different phases of the present. Both in the doctrine of recapitulation and in the idea of environment, biology is very near to a direct recognition of this fact, for in the first place the inner truth of recapitulation, when carried to its last conclusion, can be only the coexistence of sequences; and in the second place, any environment, yours or mine or any living creature's, is nothing more or less than a sphere of coexistences in which the past and the future are organically contemporised with the present. The individual recapitulates its evolution; the individual is a function of environment; environment is a sphere of coexistences: only put these three things together, adapting them to each other, and you will see how biology to-day is bringing sequence and coexistence intimately together. Then, as if to crown all, remember that for the same biology, which entertains these doctrines of recapitulation and environment, life is no local and temporal endowment but the affair of an indivisible whole.

Take a very simple case. Think of the surroundings of a pedestrian to whom as he moves along both past and future are al-

ways materially, coexistently, contemporaneously present. Change there is of course, but only in the form of a perfectly continuous expression of the persistent relations of coexistences. In terms usually employed differently it is a change that is as conservative as it is radical; and, to make the general application, what the complex system of coexisting landmarks is to the pedestrian the manifold conditions of human activity are to human history and environment at large to life's evolution.

Again, psychologically, consciousness which is not to be separated from life and which is so peculiarly concerned with experience in temporal series, includes memories and foresights or prophecies that are always incident to present physical and physiological disturbances. To appreciate the significance of this one needs only to remember, first, that the "present disturbances" have their place in the unity of all nature; and, second, that even the consciousness of modern psychology, like the life of modern biology, is no local and temporal endowment.

Biology and psychology, then, give evidence that sequence and coexistence, being veritable functions of each other, can be equated. But the same testimony comes from the mathematical sciences also, and if possible with even greater emphasis. A formal science is chiefly valuable for the pure light that it casts upon ultimate principles, material sciences being more or less colored and obscure. In the current physics, so thoroughly imbued with mathematical ideals, motion and force, affairs as they are of the indivisible universe, imply the very contemporaneity or coexistence of sequences or the sequence of coexistences that has been considered here. Does not physics describe motion in terms of a law that quite transcends the mere differences of past, present and future? Has not mathematics through its use of limits and infinitesimals turned the very coexistences of space into motion?

So, if we are to take the sciences, formal and material, seriously, sequence and coexistence, time and space must be truths about each other, each a witness to something in and of the other, space of contemporaneity even in time and time of motion even in space. Moreover, nothing can testify more strongly to the intimacy

of space and time with an omnipresent and eternal reality that this intimacy that they have with each other, for, to repeat, space or coexistence conserves the temporal, making it eternal, and time or sequence realises or expresses the spatial or local, making it omnipresent. To recur to the first illustration, how lawless, how idle and empty history would be apart from territorial conditions and resources and how meaningless territory would be apart from the realising movement of history.

It now appears that in a perfectly genuine sense and in a sense of greatest importance, flagrantly paradoxical though the form of statement is, being anywhere is also being everywhere and being ever is also being always, and in so far as this is an account of reality as well as a report of the nature of space and time it must contain the conception of immortality that we are seeking here. Moreover, it is quite as applicable to the being of such conscious creatures as you and I as to that of the material elements which the physicists are pleased at times to call "centres of force" in recognition of their reality beyond their own time and place. Still before we turn to the doctrine of immortality which our monistic and evolutionary view of space and time would justify, a third conception, that of matter, awaits attention.

The conception of matter must be and may be very briefly treated. From our present standpoint matter as a form of reality that may be in space and time but is not also of them is an wholly gratuitous thing. The spatial and temporal is the real; in and of itself it is material. An indivisible space and an indivisible time are quite incapable of *containing* anything, be it matter or whatever else you like. They cannot *contain* matter, because—to repeat—by dint of their unity, by dint of their mutual intimacy, they are matter. This is perhaps a strange conclusion and over-subtle as well as strange, but surely evolution requires it and evolutionists are more or less directly admitting it. What would become of evolution if the spatial and temporal and the materially real were not one and inseparable? Evolution simply needs space and time—the latter perhaps more obviously—as positive dimensions of reality. And thus the mathematical physics and chemistry of the day,

as if to serve the interests of evolution, are even sometimes confessing and are always implying their independence of a separate material substance. Peculiarly for them the spatial and temporal is the material. But would you still insist that motion is unthinkable apart from a separate matter, since there must surely be something to move? Then you forget, what has indeed been already referred to here, that mathematics, whose infinitesimal reveals wonders and seems even to perform miracles, finds motion, not of something in space, but in and of space itself. And as for force, which is another concept that may seem to be in need of a separate matter, through which as it were to get an effective reality, this can be only the necessity of motion.

But, further, not only from our present standpoint may we and must we dispense with the thought of a separate absolutely non-spatial and non-temporal material reality, but also we can and we must recognise the matter, by virtue of which the spatial and temporal is materially real, as spirit too, so that a separate spiritual reality as well as a separate material reality can be dismissed. The real, in short, is one, not two; it is at once material and spiritual, being material because spatial and temporal, and spiritual because indivisible and giving to its parts a genuine omnipresence and eternity. All of which is but to say that in the conception of organism, which we owe not less to physics than to psychology, not less to mathematics than to biology, the material and spiritual are inseparable; in it they are made as inseparably one as in its special and most directly human example, the brotherhood of man. Since the dawn of Christianity divinity has meant, more than anything else, the unity of human life. In fact, the objective sciences are far from being alone in this testimony to the identity of the material and the spiritual, for in the popular consciousness, whenever it turns to morals and religion, there is a growing conviction that spirit and matter—nay, even God and man—are not two separate natures but one. And the ideal life to-day exists—does it not?—in an adequate expression of worldly relationships, spirituality being no cloistered existence but active adaptation to affairs of the day.

Somebody protests, reminding me that if matter is also spirit it must at least be alive and conscious. So it must and so it is. Matter, identified as here it has been identified with an organic reality, *is* alive and conscious. Surely, it is comparatively simple to put together all the different testimonies of the several sciences and make one truth of them. Motion and force and life and consciousness are each and all recognised as belonging only to an indivisible universe, and this does but mean that one is no longer bound, as the pluralists are, to find motion here and force there and life and consciousness in their own separate places, for all, if they must be located, are coextensive; wherever the one is the others are; and such coextension means essential unity. I know very well that prominent thinkers of quite recent times—only it seems to me that they stop their thinking where they most need to begin it—are greatly troubled over a seeming contradiction between the physical law of conservation of energy and the idea of consciousness as effecting physical changes, for example, as altering the positions of molecules in the brain, or again between the doctrine of survival of the fittest and that of consciousness as a result without being a condition of evolution, but—not to say more—such thinkers are certainly thoughtless enough to be standing in their own light. Conservation¹ and consciousness—which *is* a condition as well as a result—and life by survival of the fittest are hardly inconsistent, when if squarely faced they one and all testify to the unity of the same universe.

But I must continue my argument. Space and time and matter have been examined sufficiently for the purposes of this paper, and the monistic and evolutionary conception of immortality can now be presented more fully and more directly, first, in a general way, that may seem still formal and abstruse, and then in the way of illustration and application.

¹ Conservation is thoughtlessly supposed to refer to a fixed quantity, but this reference is absurd, for the quantity would have to be finite and the constancy of a finite quantity is unthinkable, being a contradiction of terms. As for infinity, this is not a quantity at all but as commonly used a quantitative abstraction for quality. See also article *Physical Psychology*, in the *Psychological Review*, March, 1900.

Instead of identifying immortality with the simple and indivisible in the sense of that which is altogether out of space and time we must identify it with the organic, which although complex is nevertheless also spatially and temporally indivisible. The composite and divisible may decompose and decomposition is death, but the organic never dies. I do not say that organisms never die and certainly I do say that there are no minute immortal "vital units," as if life-atoms; all organisms, great or small, do die or rather as so many independent individuals they are never alive. The organic is one, not many, and its very changes are an incident of its peculiar unity. It changes, but is only in its changing; it changes, yet never dies. The death of individuals is the life of the One, of the Whole, to which they belong; and, more than this, it is their life too, their real life, for—if I must repeat—as separate individuals in a divisible space and time they are never alive. The organic, then, is a constant triumph over death, and above all over the death of individuals; and also, as something which it is important to add and which is not less worth reflecting upon, it is a constant triumph over birth. Individuals, *real* individuals, even as Christianity would have it, are not begotten, nor do they die.

And what can all this mean? Such verbal formulæ are abstruse; they are blind. All that has been said about the spatial and temporal being also omnipresent and eternal and so one and the same with the real, or about matter being spiritual and spirit material, nay, life itself and all that life includes may be in them and in them as compactly as Newton put the solar system into the law of gravitation, but still one has to ask: What do they mean to humanity? To human history? To human hope?

They mean—do they not?—that transfiguration of individuality which was referred to at the beginning. Where the real is the organic, where life and consciousness are not local and temporal endowments but affairs of a universe spatially and temporally indivisible, individuality can consist, not in local and temporal existence, nor yet in separation as an immaterial entity from the spatial and temporal, but only in something that forever holds the here and the yonder, the now and the then, the this and the that, in-

separably together. And what can ever do so much as this? So commonplace a thing as life does it and consciousness does it. Life and consciousness, standing as they do for the intimacy of our relation to the outer world, an intimacy which is so complete that the life or the consciousness belongs not less to the world than to us, are that in which the here and the yonder of human existence, the now and the then, the this and the that, are held inseparably together. What indeed have we been led to believe of the outer world? It is our whole history, nay, our whole evolution, our past and our present and our future, made contemporaneous or all the existing incidents of our being active as one. And what are we as conscious and animate but intimate functions of that which encompasses us? As creatures, then, that have hands, that walk, that are members of families, that belong to human societies, that have manifold relations to nature at large, we live and move and have our being, our conscious being, in an activity that for each particular function, for each particular relation, is as far-reaching and as deep-lying as the universe itself. In the love and service of a mother as in the simple action of a hand that seizes something, the here and the yonder, the now and the then, the this and the that, are bound together. Why, the force of all nature is in the hand's movement, and the motherhood of a universe in any mother's love and service. Spinoza, whose suggestion upon this matter I am fond of quoting, once said in so many words that the hammer was not created, since it takes and must have taken a hammer to make a hammer. Plainly this means that hammering as an activity is as old as reality, and the hand as old as hammering. Moreover not only eternity but also universality belongs to the hammer, for from the standpoint of principle the hammer is in all tools and all tools are in it, and if any tool—and this means any thing or force or value in environment—is both eternal and universal, then any activity is also both eternal and universal. Motherhood, then, or whatever else in the life of mankind makes individuality immortal and universal; and this is to say that it is one and indivisible. Who does not cherish the unity of all motherhood? Who does not apply, and delight in applying what the scientists call the unity of nature

to the relations of family as well as to the other relations, the other functions or activities of life? Space and time may have or bring their differences but the life and consciousness of motherhood is everywhere and always one and the life and consciousness of anything that gives life value and us that live individuality is always and everywhere one. Can we forget, after so much reiteration, that even conscious life is neither local nor temporal? Birth and death are indeed incidents of individuality, but they are not makers of it; they neither create nor destroy it. Is the hand no more than a physical mass existing here or there and now or then? Common sense as well as philosophy makes it more. The hand was never born and will never pass away. All individuality, then, be it that of the hand or of some distinctly social function or of sex or of any active relation whatsoever, is as immortal as individual; it fills all space as well as this space and all time as well as this time.

Somebody objects vigorously, charging that I am abusing words and no word so much as individuality itself. This charge, however, as I understand it, is a strange one. Aside from the philosophical interest in consistency, which is naturally so keen with ~~with~~ me in this paper on evolution, I cannot understand how any one who has ever taken his belief in immortality seriously can object to being told that individuality not less now than heretofore or than hereafter is a function instead of a mere existence, or suppose I say a loyalty instead of a mere selfishness, or how any one can entertain the Christian doctrine of the brotherhood of man and then interpret the Conception or the Resurrection in any other way than that which finds in them the reality, the abiding reality in the sense of independence of the conditions of birth and death, of an individuality, which is a relationship, an active human relationship, not a physical nor yet a spiritual or immaterial isolation. How can any one help seeing in those great conceptions, and I am willing to say too in those great facts, that the activities which have any meaning, which make our being worth while and us real, are referable only to life or existence as a single persisting whole? Only remember, what in substance I keep saying, that the whole is one which changes; it is and it *is* only in its changing; it changes but

never dies: and in it we live and move and have our being, our conscious being.

But, still unconvinced, some one insists that consciousness *is* born and that consciousness *does* die, for there is no memory in a new-born child and we have no communication with the hereafter, such experience as may possibly belong to us before birth or after death being altogether different in kind—if it is at all—from the rational consciousness of our worldly sojourn. Very true; one can not avoid saying just this and believing this, if one thinks of consciousness as only the special endowment of certain physically determined individuals. Consciousness, however, as said now so often, is anything but that and since it is so different we can expect, we can find different things in it. Moreover, to suggest a question of fact, as regards a child's lack of memory we may ask most pertinently if in the sense meant anybody ever remembers anything even from day to day. Memory, I venture to say, no doubt with the prejudice of monism and evolution but also with science at my back, is never a literal reproduction or retention of past experience; it is always only a peculiar adaptation to conditions of the present; and so understood it belongs as much to the youngest infant as to you or me.

And with reference to the lack of communication with the hereafter it seems to me to be also quite pertinent to say, in the first place, that consciousness never is without prophetic character, although its prophecies like its memories cannot be literal, and secondly that the sort of literal communication between the living and the dead, which some do indeed believe in and the denial of which was just now used in evidence of consciousness being limited to the period from birth to death, is not even the privilege of the living among themselves. Consciousness in general relates us to what is different or other; its function is one of differentiation, not of direct communion, whether of man with nature or of man with man; and in what we call conscious communication not only are the conscious creatures differentiated from each other but also they are related to what is beyond them, and not merely to what is near but also even to what is farthest, in space and in time. The so-

called relativity of all individual consciousness or of the consciousness of a group of communicating individuals, affording as it does only another view of the fact that consciousness is an affair of the whole and so belongs to individuals only as they can be identified with what is universal and eternal, is the reason for this transcendence of limitations, for this communication with the yonder and the hereafter that belongs to all consciousness.

Is this spiritualism? Hardly. Is it even mental telepathy? Not even that, although it is to recognise a germ of truth in both mental telepathy and spiritualism. The worst extravagances unfortunately—or perhaps fortunately—always have some justification. To speak technically the difference between the spiritualism and the telepathy here recognised and the spiritualism and the telepathy that have had some vogue in the life of our time is the difference between monism which finds the spiritual and its independence of space and time in and of the material and dualism which finds spiritual and material wholly apart. With the spiritual in and of the material the spiritualism of the day loses the wind from its sails, for the here and the hereafter, this world and the other world are made one in life and in consciousness, so that a verbal communication between them becomes unnecessary. No doubt, when I said above in the discussion of space and time that in a thoroughly genuine sense nothing was anywhere without also being everywhere and nothing ever without also being always, any one who is imbued with the standpoint of science, must have been ready at least at first reading to call me all sorts of abusive names and “arrant spiritualist” among the rest, but the sense, genuine as it was, in which I used the paradoxes must have saved me. I meant no denial of the impenetrability or the conservation of matter or of whatever in the most recent theories is now standing for these and no dislocation of historical order, but on the contrary I meant exactly what science itself has been meaning, namely, the unity, the material as well as the formal unity of all that is. Only to take this unity seriously—and too many do not take it so—is to believe that the yonder and the hereafter are here and now, that they are actual and active in the life and consciousness of the pres-

ent, but not directly and not literally, not in the forms of knocking and slate-writing and crystal imagery. Certain worthy mystics and dualists, be they in high places or in low, may believe in these uncanny wonders if they like, but writing and imagery and all are I think, safely described not as the future's direct messages to the present but rather as the present's readings of the future or as only the present's peculiar adaptations to certain unusual conditions, the peculiarity being perhaps most evident in their conspicuous futility. As reminiscences they are so idle, satisfying at best only a morbid curiosity, and as prophecies they belong to the *ex post facto* sort. Literalism, verbalism is always futile. Given a well-set conviction of dualism, of a complete separation of the material and the spiritual, to start with, and one can, nay, one must explain the fact of communication spiritualistically; one can and one must distort the fact into all sorts of things uncanny as easily as a fugitive from justice sees an officer in every shadow or as an excited person recognises the signature of a telegram, but it suffices to say that the dualism is wrong. That the spiritual does communicate with the material who can doubt? But it speaks in and through the life that is, not from without to it, and this being so it needs neither slates nor crystals and it might possibly get along without Mrs. Piper. There are cases, I know, cases both of telepathy and of spiritualistic communication, that are reported and that are about as hard to doubt as to explain, but in a world that is one and indivisible and that is spiritual in being material at least the bare fact of communication is to be expected, not wondered at, and as for the manner of it, besides repeating that it is only a peculiar adaptation to unusual conditions, I venture merely to suggest that what is actually done voluntarily and in general whatever can be consciously arranged is bound to occur at times, although at rare times, involuntarily.

I have digressed long enough, if indeed it has been digression to speak of spiritualism and its kind. That consciousness was not born and does not die was what I set out to show and I must now hope that this thought has been at least foreshadowed, but in any case, to fall back on my base, a genuine evolution is certainly quite unthinkable without it. Consciousness must be quite as much

a condition as a result of evolution and in a world of which evolution is true it can not be local and temporal, it must be as widespread and as persistent, as all-inclusive and as indivisible as life itself.

So, to return, by way of indicating still more directly the meaning to human life of the monistic and evolutionary conception of immortality I would conclude by speaking briefly of its effects on the interpretation of history, on our feeling about the life and death of our fellows, and on the primary doctrines of Christianity. We commonly think of history as the passing of persons, nations, civilisations. Men come and go, but history runs on forever. To be sure, it accumulates, as if its gifts from humanity, innumerable treasures, books, relics, institutions, buildings, machinery and the like, but the donors, as we are wont to think, are lost to it, remaining as ideal influences perhaps but not as vitally active in the life they once assisted. This common view, however, must be wrong. At least it is hardly consistent with the best thought of our day. The past is contemporary with the present, not merely formally contemporary, in that we know it only in the light of present standards, but materially contemporary also in that those that were live now. Have we their literature? Yes, and their consciousness too. Their institutions? And also their life. Their achievements? And their power and will. Altogether too fanciful, some one thinks; but do give it meaning from the standpoint of what has already been asserted about individuality, about the spatial and temporal, about life and consciousness. Our life and our consciousness and our will are theirs also, for it is wrong, it must be wrong to think of the life of the past and the life of the present as two lives, as independent and perhaps even different in kind. The two are one, vitally one. Not those that are now gone once lived and we live, but they and we are living, they in us and we with them; they live in us, to give a familiar analogy, that is perhaps more than an analogy, very much as our own past selves are alive with us to-day. If a physical scientist can see the same force in the military weapons and engines of ancient times that he sees in those of our own time, if a sociologist can find the same social phenomena then and now, may

not the historian regard the older life in general and the newer life as not less intimate? Did different winds blow in 1492 from those that blow to-day? Was it a different sun than shone in 500 B. C. or in 500 A. D. from that which shines to-day? We do not deny that the animal nature is still alive in us as well as around us, although at the same time we suppose it to belong to a very early period in our existence, in what we are pleased to call our evolution. Why, then, should we exclude what is so much more recent? Can we, foresooth, satisfy ourselves with the materialism that entombs the historic past in books and monuments? Then we forget how books are written and how monuments arise and how in general the past comes to be. The future writes books and erects monuments. The past's great men, to turn to them, have always been, as if made by the future, "ahead of their times." Surely a most uncanny phrase, unless one can find the life and deeds of all times to be the life and deeds of one time. A man is great only as he identifies himself with some social force, with some actual movement of his day, fulfilling it out of a long past, bringing it to focus and so making it definite and manifest, and as the life around him, which gave him birth, in proof of his greatness in turn identifies itself with him, adopting his will and repeating his achievement. History has many cases of human societies repeating in their life as a whole, the careers of their great men. Only it is not repetition exactly; it is resurrection and continuation. Great men make history, but they make it only because they are alive in it before their birth and survive in it, in its doing and in its thinking, after they die. Would history be even thinkable without such continuity? Could we honestly call it our history? What good American to-day is not convinced that he has a share in what Washington and Lincoln accomplished years ago or also—and this we regret—in the doings of Arnold and Davis and Booth? And, to put a very practical question, would it not be well if in the popular consciousness our great men, whether good or bad, were really identified with history instead of being treated as fixtures outside of it? Make them separate fixtures and you make them oracles, the spirits of another world, with which the demagogue, as if a medium, can ex-

cite the people, but identify them with history and they grow with it, speaking always out of the present, never out of the past. Hero-worship is too often idolatry, and for my part the literalism of it is only spiritualism trying to be respectable or say spiritualism under the law. Every bad thing, of course, has to have its lawful or respectable expression.

So much for history, for the life with the past, for relation to the great, but what of friendships and family ties? Can we view these in the same light? As an evolutionist I think we can; I think we must; I think we would. Perhaps I may not speak so freely here, for the mind rather than the heart is now addressed but the relations of friendship and kinship are not born nor do they die and friends abroad and kin at home live and move and have their being only in these. Does it destroy or even weaken the meaning or the reality of friendship to have it said that the relation is as universal as particular or local and as eternal as temporal? On the contrary, universality is essential to meaning and to reality. Is the consciousness, the experience, which we call friendship, to be separated from consciousness or experience in general? If so, our friends do die, remaining to us, like the characters of the older history, as only ideal influences or as spirits that sometimes idly chatter. But friendship, like experience in its entirety, is of the whole as well as of the part, and the friends that lived live still. In others? Yes, and in ourselves too, or rather in the relation of man to man or in the unity of all that lives, of all that is. Not literally in others, then, although the meaning is perfectly genuine, nor yet literally in ourselves, for nothing like transmigration is intended, but—to repeat—in the living relationship of friends. There is indeed a truth in transmigration; witness all the facts of inheritance, of historical succession, of social growth, of evolution, but it is the truth or is near to the truth of what physical science, thinking of force and having such meaning as we are coming to know, has called transmutation, the truth of a reality that is conserved even in its changing. So, again, the friends that lived live still. Brotherhood, however, and fatherhood and motherhood and all the relations of kin, nay, all the relations of life, that make our indi-

viduality real, persist in the same way; for they are also one, not merely many; everywhere, not merely here; and always, not merely now. Where would faith go, and where worth and responsibility and freedom, if birth created and death destroyed, or if birth were a coming from no one knows where, from a realm unlike and apart, and death the return? Birth does not create or translate; it only expresses, revealing and defining. Death does not destroy; it only fulfils.

Mere words of philosophy! Possibly. And Christianity has said, and said again and again, the same thing. To science, I know, we are peculiarly indebted for the conception of organism, of an organic reality, which enables us to bring together the universal and the individual, the eternal and the temporal, the omnipresent and the local, without losing the worth or the reality of either, but when all is said science has only applied at large the very special and personal doctrines of Christianity and has therein helped Christianity to a clearer consciousness of itself. Some of these doctrines have been referred to already and others may be mentioned, although discussion of them is even more constrained than was that of kinship and relationship. The Resurrection, the Immaculate Conception, the Divinity, the Immediacy of the Kingdom of Heaven, the Sacrifice, and the Brotherhood of Man are doctrines which one and all testify that our real being, our real individuality, lies not in a separate existence of any sort but in the abiding relations of our present life. In these the Christ resides, the always living Christ. What else can the following mean? "In as much as ye have done it unto one of these, my brethren, even these least, ye have done it unto me," and again: "For whosoever shall do the will of my father which is in heaven, the same is my brother and sister and mother." The Living Christ, one of the dogmas of our day, is more than a fancy and more than a dogma, and for no one so truly as for an evolutionist. Christ was too great, too deep-lying, and too far-reaching in human history not to be more. Often we are told that the letter of Christianity has got to go, but it is quite as true that the real letter of Christianity has got to stay; the real letter, I say, not the parody of a mere physi-

cal appearance and reappearance nearly two thousand years ago. If Christ was really not born as men are born, if he really lives in our lives to-day, if Christianity really means the brotherhood of humanity and the divinity of man, then simply the Christ was more than the creature of a single moment or a single place and more than the creature of another world, and instead of resorting to such facts as partheno-genesis and trance to explain the birth and the resurrection we must identify him with an individuality that is neither purely physical nor abstractly spiritual but both physical and spiritual. Certainly, he was in his times, *but he was also of them*, so that the universal as well as the local, the eternal as well as the temporal was in him, and to-day he is in us, being one with the relations of family, the relations of society, the relations of nature, in which we have our being now and hereafter.

Nothing that is worth having or worth getting or worth saving, nothing that is real and abiding, nothing that is worthy of immortality, is not already real in us, real in our life, real in our experience. For evolution the maintenance of what is, nothing more, nothing less, is our immortality.

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THE CONDITIONS OF HUMAN PROGRESS.

BEFORE passing in succeeding essays to the relation of science to metaphysics in ethics, in æsthetics, and in history, it will be well to consider some of the conditions of human progress. Regarding as we do the whole range of social phenomena as susceptible of scientific explanation in terms of antecedence and sequence; regarding evolution as the key to this explanation; and regarding animal behaviour as affording some evidence of the embryological condition from which human conduct has been developed; we feel convinced that the foundations of any adequate study of social phenomena must be laid in biology; and that the lessons of organic life must be laid to heart by those who would apply the principle of evolution in the study of mankind. We shall first, therefore, discuss our problem in some of its aspects from the scientific standpoint, and then briefly indicate some of the metaphysical implications.

In the days before Evolution was on every one's lips, human faculty was regarded as a special endowment, variable no doubt, but subject to no definite law of increase within any given race or community. Unusual ability was indeed expected, and not infrequently found, in the sons of conspicuously able parents. But, broadly considered, the progress of civilised mankind was attributed rather to increased opportunities for the exercise of given moral and intellectual power than to any general and steady improvement in natural endowment. Human institutions, discoveries, inventions, art products, were seen to grow under the hands of successive generations, each of which contributed more or less to the social heritage of the community; human faculty was obviously

employed to better and better advantage as the social conditions improved from age to age; but of any progressive evolution of mother wit and innate ability our forefathers seem to have had no conception, or at any rate could produce no sufficient evidence.

But when the idea of organic evolution had gained ground and when the evolution of mental faculties came more and more prominently into view, the question inevitably arose whether human faculty was not also in process of development. Mr. Herbert Spencer strenuously contended that the increase of mental vigor acquired by parents is transmitted in some degree to their children, who thus start at a higher level of natural and inborn intellectual power than their progenitors. And if this occur in civilised mankind it follows that the average level of mother wit and innate mental force is higher in England to-day than it was in the reigns of the Plantagenets or the Tudors. Darwin's advocacy of natural selection as the main cause of organic progress led to its application in human affairs. And if natural selection be still operative among the individuals which constitute a civilised community, it follows that, by the survival of the better endowed intellectually and morally, the level of human faculty must steadily rise from generation to generation. Assuming therefore that the principles developed by Mr. Herbert Spencer and by Darwin are sound, and that they are applicable to human folk under the conditions of civilisation, it would seem that not only is there a steady progress in the opportunity under which mental faculty may be employed, but also an increase of the faculty itself which may be so exercised.

Neither Mr. Spencer's principle, however, nor the application of natural selection to civilised communities, pass unchallenged at the present time. We must therefore consider briefly the criticisms to which they may be subjected, and endeavor to formulate anew what appear to be the conditions of human progress. It will be convenient to deal first with natural selection.

The method of natural selection as it is commonly held to apply in the evolution of animals and plants is so well known as scarcely to need description. And yet there still linger popular misconceptions which are perhaps nowhere more obtrusive than in

the field of thought under consideration. Since competition and the struggle for existence are essential features in Darwin's conception, and since competition and struggle are sufficiently obvious among civilised mankind to-day, the conclusion, by no means necessarily true, is rashly accepted that natural selection is the inevitable outcome of this competition. But natural selection results from the death, or the exclusion from mating, of the unfit, leaving only the more fit to survive and mate. It is founded on three assumptions; first that, among those who are born some are by natural endowment fitter than others; secondly that there is competition; and thirdly that under this competition the less fit are ousted from the race, and the more fit alone remain to perpetuate their kind. Now there can be no question that the first two assumptions hold good in civilised races; some men are born with better natural faculties than others; there is a struggle for existence. But how about the third? Can we assert with the confidence of conviction, that those below par, morally and intellectually, are being weeded out, and that only those who are above par marry and have children? Can we even say that the children of those who are above par, steadily out-number the children of those who are below par? Nothing less than this will suffice to establish even the preliminary assumptions of natural selection. Such evidence as we have appears rather to support a contrary conclusion. In no important degree is there an elimination of human failures. Civilisation does all it can to assist and to protect them. A struggle for existence there is—and a hard enough struggle many find it. Competition there is—more than enough. But of elimination of the unfit, leaving only their moral and intellectual superiors to marry and have offspring, there is, it may be urged, not so much as to counteract the effects of the extravagant output of children among those below the mean level of mediocrity. Consider what the natural selection as a factor in progress means. It means that in any series of generations the offspring of those endowed with better mental faculties—those offspring which reach the age of effectual parenthood—outnumber the children of those who are less favorably endowed. Can any reasonable man believe that this is obvi-

ously true of human beings under the conditions of what we call civilisation? This is the question asked by those who criticise the application of natural selection among ourselves to-day. And they contend that, as an influence of any importance on human progress in civilised countries, natural selection is out of court.

What then can be urged on the other side of the question? It may be said that the microbe, the seeds of disease, and drink are still with us, and effect a certain amount of elimination. But, so far as mental endowment is concerned, it has to be shown that disease and drink remove a greater number of those who are below the level of intellectual mediocrity than above it. Granted for the sake of argument that, paradoxical as it may sound, disease is the condition under which, in spite of the doctors, a healthy race is evolved (and this is what the above argument practically comes to); is the more healthy race necessarily endowed with better mental faculties? Unless this can be shown to be the case the improvement of mother wit by disease remains unproven. Again it may be said that the scaffold and the prison tend to eliminate from the community our social failures. The criminal classes may, on this view be regarded as bunglers in knavery; too weak morally to resist temptation, too weak intellectually to escape detection. Granting, however, that there is here some amount of elimination, it can hardly be regarded as sufficient to bring about any material raising of the mean mental standard of civilised folk. There remains emigration which removes from Great Britain a small percentage of those who are commonly regarded as our failures. Whether the mean capacity of emigrants is decidedly lower than of those who are left behind is exceedingly difficult to decide. While many of the poorer classes who leave our islands are perhaps inferior to those who remain, there are not a few setting forth year by year to America and our colonies who are above par in energy, perseverance, and pluck. Granting, however, that there is through emigration some preponderant elimination of failures, does it amount to much? If it does, it must follow that the mean level of capacity in our colonies is by so much lower than the mean level of capacity in England—an assumption which is not likely to be acceptable in

Canada or Australia. On the whole therefore it is, to say the least of it, questionable, whether elimination by disease, by crime, and by emigration, taken together, outweigh the tendency of the sub-mediocrities to multiply more rapidly than the super-mediocrities. At any rate we may go so far as to say that there is at present no satisfactory and conclusive evidence that, by any process of elimination now in progress, or by any natural selection of the intellectual, the mean level of faculty is steadily rising.

No doubt there is a certain amount of what is termed by naturalists segregation. The more intellectual tend to congregate together and to intermarry; so to some extent do the less intellectual. Hence arises a system of intellectual grades. But when we are dealing with average intellectual capacity we have in view the mean of all grades. Segregation only affects the distribution of the material. If we have a box of shot of different sizes varying around a given mean, no change is effected by mere arrangement of the shot in a definitely graded series. Only if it be shown that the larger human shot multiply more rapidly than the smaller, will the mean size be raised. If the smaller shot multiply more rapidly the mean size will be diminished. In neither case need there be any elimination or selection; it is merely a question of relative fecundity. Only on the supposition that the rate of propagation on either side of the level of mean capacity is equal, will that level remain constant. It is a matter on which evidence is hard to obtain. But there do not seem good grounds for the hypothesis that the super-mediocrities are the more prolific.

Does sexual selection in civilised mankind tend to alter the level of mean capacity? A difficult and delicate question. It comes to this. Are confirmed bachelors and old maids mentally the inferiors of married folk? I dare not answer the question, having close friends in both camps. If matrimonial selection were based solely on mental endowment we should presumably be bound to reply in the affirmative. But good looks and annual income are disturbing factors, and one may at least feel doubtful whether brains are much on the increase through sexual selection.

Thus it would seem questionable whether the distinctively

Darwinian factors of evolution are efficacious in raising the standard of mental endowment in civilised communities. Among savage races and in early stages of the development of European peoples it may have had more efficacy.

Passing now to that kind of heredity on the importance of which Mr. Herbert Spencer insists, we find that the criticism is based on very different foundations. Natural selection is pretty generally admitted as a factor in organic evolution ; but, as is well known, the transmission from parent to child of individually-won increments of faculty, or more generally the inheritance of acquired characters, is denied by many of our leading biologists. In the one case it is questioned whether natural selection, efficacious as it is in the evolution of animals and plants, is operative in the case of civilised communities. In the other case it is denied that the inheritance of acquired increments of faculty or structure is anywhere admissible as effective in organic progress. It would seem, then, that this problem must first be solved on general biological grounds before we are justified in applying it in the field of human progress.

We may, however, fairly ask whether the facts of human progress are such as to necessitate the application of some such principle. Is there a progressive advance in mean mental capacity, inborn and hereditary, which demands some such explanation as Mr. Herbert Spencer's principle purports to supply? There are at any rate some writers and thinkers of authority and repute who doubt whether there is any such progressive advance. Buckle, writing in 1858, says, in his *History of Civilisation* (Vol. I., p. 178):

"Whatever, therefore, the moral and intellectual progress of men may be, it resolves itself not into the progress of natural capacity, but into a progress, if I may say so, of opportunity; that is, an improvement in the circumstances under which that capacity after birth comes into play. Here then is the gist of the whole matter. The progress is one not of internal power but of external advantage."

To much the same effect Mr. Lecky, in his *England in the Eighteenth Century* (Vol. I., p. 174), remarks: "How little evidence we have of any great difference in respect to innate ability between different nations or ages. The amount of realised talent in a community depends mainly on the circumstances in which it is placed,

and, above all, upon the disposition which animates it." Mr. Kidd, in his *Social Evolution*, in adopting a similar view, quotes Mr. Gladstone as having said in an interview with Mr. Stead :

"I sometimes say, that I do not see that progress in the development of brain power which we ought to expect. . . . Development, no doubt, is a slow process, but I do not see it at all. I do not think we are stronger but weaker than men of the Middle Ages. I would take it as low down as men of the sixteenth century. The men of the sixteenth century were strong men, stronger in brain power than our men."

Professor Huxley too spoke with no uncertain note when he said :

"In my belief the innate qualities, physical, intellectual, and moral, of our nation have remained substantially the same for the last four or five centuries. . . . There can be no doubt that vast changes have taken place in English civilisation since the reign of the Tudors. But I am not aware of a particle of evidence in favor of the conclusion that this evolutionary process has been accompanied by any modification of the physical, or the mental, character of the men who have been the subjects of it. I have not met with any grounds for suspecting that the average Englishmen of to-day are sensibly different from those that Shakespeare knew and drew. We look into his magic mirror of the Elizabethan age, and behold, nowise darkly, the presentment of ourselves."

All of this is in accord with the conclusions which Professor Weismann has of late years been urging on biological grounds and in which, as Professor Poulton has recently shown, he was anticipated by Dr. Prichard so long ago as 1826. No one has stated the essence of these modern views more clearly than Dr. Prichard did, seventy years ago, when he wrote : "Whatever changes of organisation are superinduced by external circumstances cease with the individual, and have no influence on the race." And no one has expressed their bearing on theories of human progress more clearly than Professor Ritchie when he said in his *Darwinism and Politics*. "Might we not define civilisation in general as the sum of the contrivances which enable human beings to advance independently of heredity?"

No doubt biologists are by no means agreed in the acceptance of these negative conclusions. Mr. Herbert Spencer himself remains unshaken in his original faith. No doubt popular opinion

is in favor of the transmission from parent to child of acquired increments of faculty. But for civilised mankind there are not sufficient statistics and of the right sort, to enable us to come to any independent decision. If we listen to a discussion of the matter we can scarcely fail to notice how the arguments on either side are founded on conjectures. A great mathematician is shown to be the son of parents trained in the mathematical schools. Who can deny, some exclaim, that the special training of the parents is transmitted to the gifted child? How else can we explain the fact that he is possessed of such rare ability in this particular sphere of mental endeavor? And since such cases are numerous and varied, have we not abundant evidence of the transmission of acquired aptitude? To which others will reply: What proof do you offer of the assertion that the aptitude transmitted was acquired and not innate? It is the combined inborn faculty of two gifted parents, not the superadded training, that is inherited. And since this innate mathematical power develops under the careful teaching of trained parents; since the child grows up in an intellectual atmosphere of the higher mathematics, no wonder he displays genius of this special kind, raised to its highest expression by assiduous care and guidance. And so forth. A discussion of this kind, where conjectures gaily masquerade as evidence, is interminable. Neither side is likely to convince the other, because neither has access to the particular facts, and neither has the smallest intention of abandoning its principles. As has before been said the problem must be solved by biologists. The weight of biological evidence at present is, in my opinion, sufficient to justify an interim verdict of "not proven." Our most profitable course, therefore, will be to assume for the sake of argument, that acquired increments of faculty are not inherited, and to inquire what are the conditions of human progress on the supposition that this assumption will eventually prove to be correct.

If it be true that the faculties which lie dormant in the infant over whose cradle the mother bends to-day are no better than those which were innate in the child four centuries ago, it is clear that social progress must lie in the increased facilities and better oppor-

tunities for putting this faculty to its most efficient use. We are in fact thrown back on to the pre-evolutionary position occupied by those who considered the question before Mr. Herbert Spencer and Charles Darwin laid their theses before the world. And it would at first sight seem that evolution ceases when civilised progress commences. Such a conclusion would however be altogether erroneous. The valid conclusion is that evolution has been transferred from the organism to his environment.

Let us turn for a moment to the organic world that we may discover the germs from which this new method of evolutionary progress has developed. And let us first ask what a presumably unconscious organism, such as a plant, inherits. In the first place it inherits, within certain limits, a well-defined form, structure, and habit or mode of growth. In the second place it inherits, in greater or less degree, a plasticity which enables it to accommodate itself to varying circumstances. The characters which fall under the first head are what are technically termed congenital; those which are evoked by the play of circumstance are technically termed acquired. Both the congenital definiteness and the amount of innate plasticity are subject to variation. And the method of progress is through the natural selection of favorable variations. Among the higher animals we find heredity playing a like part. But the plasticity has taken on a new and higher form. Conscious imitation and intelligence render possible a more varied and more complex accommodation to circumstances; and where the animals live in social communities we have the beginning of tradition; we have the possibility of social inheritance running parallel with organic heredity; we have the initial stages of a transference of evolution from the organism to the environment which it creates for itself.

Picture an animal possessed of that innate plasticity which sympathy, a tendency to imitation, and intelligence imply. Suppose such an animal born into a community of this kind. He sees around him the social life of his species. Through sympathy and imitation he is impelled to enter into and become an active participant in this life. His quick intelligence enables him to follow the moves of that life's game, and he throws himself into it with energy.

If above the average of his fellows he may see new moves and carry them into execution ; through imitation and sympathy others follow suit, and adopt his methods. The game is raised to a higher level. The better procedure becomes traditional in the species. The next generation are born into a community where life's game is played on an improved and more elaborate plan with better methods and to greater advantage. Even if endowed with no inherited increment of faculty the members of this generation are none the less heirs to a better heritage, that of the improved traditions of their race. Continuity and progress are thus rendered possible in a manner and by methods different from, though arising out of, those which are seen in the organic heredity that suffices for the plant and the pre-social animal. Imitation supplies the element of continuity ; intelligence, that of progress. All that organic heredity has to do is to maintain the standard of these two essential faculties. Intelligence will devise better moves in the hazardous game where life is at stake ; imitation will enable even mediocrity to profit by them ; and succeeding generations will be the gainers, leaving intelligence free to devise yet better methods of procedure.

Such an animal is man. In his civilised state organic evolution in the race, conditioned by natural selection, has been superseded by evolution of our social environment, rendered continuous by tradition. Between the lower animals in which organic evolution prevails, and the Anglo-Saxon race of to-day among whom the evolution is of the social type, lie many grades in which the two methods overlap. The transition has been gradual. But as man became more distinctively human, and as civilisation advanced, natural selection slowly but surely waned and the social type of progress slowly but surely waxed in range and importance.

The two pre-requisites in any process of continuous evolution are continuity and progress. What, we may inquire, is that which makes social evolution possible ? If we were to ask half a dozen leading men to reply to this question in a single word, each would perhaps give a different answer. But each answer would emphasise either the element of continuity or that of progress. Mr. Balfour's reply is : Authority.

"Suppose for a moment a community of which each member should deliberately set himself the task of throwing off so far as possible all prejudices due to education; where each should consider it his duty critically to examine the grounds whereon rest every positive enactment and every moral precept which he has been accustomed to obey; to dissect all the great loyalties which make social life possible, and all the minor conventions which help to make it easy; and to weigh out with scrupulous precision the exact degree of assent which in each particular case the results of this process might seem to justify. To say that such a community, if it acted upon the opinions thus arrived at, would stand but a poor chance in the struggle for existence is to say far too little. It could never even begin to be; and if by a miracle it was created it would without doubt immediately resolve itself into its constituent elements."

And in answer to another who should reply: Not Authority but Reason—he says:

"If we are to judge with equity between these rival claimants, we must not forget that it is Authority rather than Reason to which, in the main, we owe, not religion only, but ethics and politics; that it is Authority which supplies us with essential elements in the premises of science; that it is Authority rather than Reason which lays deep the foundations of social life; that it is Authority rather than Reason which cements its superstructure. And though it may seem to savor of paradox, it is yet no exaggeration to say, that if we would find the quality in which we most notably excel the brute creation, we should look for it, not so much in our faculty of convincing and being convinced by the exercise of reasoning, as in our capacity for influencing and being influenced through the action of Authority."

Now what is this authority but the articulate voice of tradition? Is it not the condensed expression of all that is most valuable in social inheritance? May we not fairly regard the influence of authority as that which gives continuity to the thought and feeling of civilised mankind? May we not say that it represents the accumulated experience of our race? Authority links us with the past. So far we may agree with Mr. Balfour. But in authority, though we may see in it the bond of continuity, we do not find the promise of progress. The authority of to-day is not, and should not be, the authority of yesterday. If it were, social evolution would be impossible. While authority is the bond of continuity, reason is the mother of progress. Under the influence of authority man enters into his social heritage, and falls heir to the achievements of his race. Is he to rest content with transmitting this heri-

tage unimpaired? No. Much of it indeed he must leave unmodified—for life is short and the inheritance of vast extent. But he chooses out some larger or smaller plot of ground in the great estate and says: "Here will I dig, and sow, and reap. This corner of the estate shall be the better because I have lived and worked therein." In other words, selecting his field of labor, he critically tests, modifies, and, if it may be, enriches the heritage which shall pass to succeeding generations. He not only hands on authority but he becomes *an* authority—one who makes history. This is the office of reason. Of course it is only the gifted few who leave their impress on social existence—who are in the highest sense teachers of mankind. But though teachers be few their pupils may be many. Have we not all learnt from Shakspeare and Newton? Has not Darwin made the authority of to-day different from that of 1858? Every discovery, every art-product, every invention; our philosophy, our science, our music, painting, sculpture, literature; our museums, art galleries, theatres; our steamships and monster manufacturing; our intellectual, moral, and æsthetic environment; what are all these but the embodiment of the ideals which our forefathers or contemporaries have striven successfully to realise, and have impressed on the heritage of the race? They remain to give continuity to social evolution; they form the social structure which future generations will progressively modify to higher ends. This is our social heritage; this we must strive to better ere we die.

Thus although the average of human faculty may stand at no higher level—may even stand at a lower level—than it did in the days of the Tudors, social evolution still continues, and will still continue so long as that faculty is employed in building up the structure of civilised society. Each generation of builders is working at a higher level and with the better tools their predecessors have devised. The building thus fashioned is the social environment; and the essential characteristic of social progress is that evolution has been transferred from the organism to his environment. This environing social structure it is which persists. It is the product, not of the average intelligence, but of the best thought and endeavor of each succeeding age. But it forms the mould in

which mediocrity is cast. The average intelligence profits by all that human excellence achieves. And though it be true that the level of average faculty is no higher now than it was in Tudor times, yet the level of average acquisition is decidedly higher. If it be not so, then is our education futile. The same average faculty is employed to greater advantage. Four centuries of human progress have given increased facilities for putting this faculty to its most efficient use. Evolutionists have been too ready to take it for granted that the human intellect is still evolving to higher grades of perfection. For this belief there is no sufficient evidence. Not the intellect, but what it achieves has been and is being evolved. If the mediocrities of to-day are richer, intellectually and morally, than the mediocrities of Shakspeare's day, it is not through increased hereditary power of intellect or of will, but from the better opportunities rendered possible by social inheritance. They are not themselves more nobly endowed, but they are heirs to a more highly evolved social environment; they are not themselves inherently brighter, but they reflect the brightness of a more luminous social sky.

If these conclusions be based on sound reasoning, and the assumptions on which they are founded be justified by the facts, we must regard social evolution as proceeding by a method different from that which obtains in the organic nature with which the biologist has to deal. It is a superorganic evolution. But there will probably be some, perhaps many, who will cling tenaciously to older views of the range and importance of heredity. The teacher will protest that we are robbing his office of more than half its value. Our labors are largely wasted, he will complain, if they are restricted to the boys and girls before us, and are doing nothing to raise the level of faculty in the race. But there is comfort in the reflexion that his errors are also limited in their range of influence. We are training a race of examinees; and it is refreshing to think that we are not necessarily cramping the hereditary soul of man. Greater still is the solace we may find in the reflexion that the squalor and vice of our city slums is to a large degree the product

rather of a wretched and distorting environment, than of a debased and vicious hereditary nature.

Huxley said :

"In a large proportion of cases crime and pauperism have nothing to do with heredity ; but are the consequence, partly of circumstances, and, partly, of the possession of qualities, which, under different conditions of life, might have excited esteem and admiration."

There is surely hope in the belief, that, in the slums, we see rather the misapplication or the thwarting of the wholesome tendencies which man as man inherits, than the hot-bed of innate iniquity and the spawning ground of hereditary vice. Not that in-born tendencies to evil can be denied or should be overlooked ; not that a segregation of the vicious (to borrow a phrase from biological science) does not occur among the outcasts of civilisation. These are facts to be faced. And terribly stubborn facts they are. It is scarcely too much to say that organic heredity is beyond the power of man to alter or to modify. But we may place the child in circumstances which shall afford full scope for the development of all his better innate tendencies and shall thwart to the utmost the maturing of his proclivities to evil. Fortunately man inherits a plasticity, a power of accommodation to circumstances, which makes him the most mouldable of organic products. Fortunately he is "the most consummate of all mimics . . . and there is no such another emotional chameleon." He will take his color from the purer tints of more bright and healthy surroundings. Education, which is (or should be) the art of applying the suitable environment to the growing child at the successive stages of his development, will do much. And we must steadily continue our endeavors to over-master the bestial tendencies bequeathed to man by his brute ancestry, applying to the utmost the well-directed pressure and influence of all that is best and most civilising in the social inheritance which is the legacy of the founders of our common humanity.

Those who find it difficult or distasteful to accept the conclusion that there is no hereditary increment of moral and intellectual power may urge that the mental equipment of the average man to-

day is demonstrably better than that of his predecessors. But everything here depends on what is to be understood by mental equipment. The question is whether he is better equipped by nature or by art. Has he stronger mother wit, or is he better educated? It has been my good fortune to meet not a few artisans whose natural equipment has filled me with admiration. And I have said to myself: "If only these good fellows had enjoyed the opportunity of intellectual development under the guiding touch of all that is best in our social heritage of thought, science, and art, they would have been makers of history in some department of human endeavor. Their natural equipment is splendid; their equipment through the art of education of the rudest and most elementary kind. On the other hand, which of us has not met men of only average natural ability, who have had a training so careful and well-directed, that they have been able to cut a better figure in the world than thousands whose hereditary outfit was richer in promise? It is the natural equipment of the average man that, in Huxley's opinion, is no better now than it was in the days of the Tudors. The richer and more extensive stock in trade of the nineteenth-century city clerk has been gleaned from the stores which have accumulated during four centuries of social inheritance. It is this heritage, not his natural organic heritage, that has increased through the accumulation of intellectual wealth. And if we turn from the average to the exceptional, can it be maintained that there is a higher percentage of men of commanding genius in the decade now drawing to its close than there was during the last decade of the fifteenth century?

Again it may be said that Huxley's assertion that vice is in a large degree due to circumstance and nurture comes perilously near to a denial of the demonstrable efficacy of heredity in the transmission of moral and intellectual idiosyncrasies. But Huxley was lacking neither in common sense nor in practical powers of observation. He would have been by no means the last to proclaim that hereditary tendencies moral and intellectual, good and bad, are undeniable and unquestionable. These tendencies we must accept; for they are, in the existing social system, unalterable by human ingenuity. All that we can do is to prevent, in some degree, the

evil tendencies from realising themselves in act and deed. That upon which our argument is based is not a denial of heredity in man, which would indeed be absurd, but the assumption that human progress is the expression rather of the social inheritance of human achievement than of the progressive improvement of that which is given in organic heredity. And it is claimed that this social inheritance has a wider influence than merely organic heritage. Let us grant that Darwin was an example of hereditary genius. How does the rising generation profit thereby? His gifted sons do indeed inherit no mean share of his great powers. But the whole civilised world profits by his thought. It has enriched the intellectual and moral atmosphere we breathe. It has become part of our social inheritance.

Once more it may be urged that since mankind form the social environment of man, in saying that evolution is transferred from the individual to his environment we are only asserting, in somewhat pedantic phraseology, that the transference is from man to mankind. But our contention is that not mankind but the achievements of mankind form our social environment. Literature, art, philosophy, science, industrial inventions; these are not mankind but its products. These form the atmosphere we breathe. And the analogy may serve to make clearer the essential nature of the transference. It is assumed that the lungs of the mind are no better than they have been for generations, but that the air they take in is richer in moral and intellectual oxygen. If the city clerk to-day has more mental vigor than he who occupied the stool a few generations ago, it is not because he has better lung-power but because more of this oxygen courses through his blood. It is not the lung-capacity but the atmosphere that is being evolved. But since a richer atmosphere brings more vitality, the intellectual vigor of the average man is heightened through the purer and richer air which is his through the social heritage of a more highly evolved environment.

The conclusions which we reach must be stated in frankly hypothetical form, since they are founded on assumptions, which cannot at present be established by adequate statistical evidence.

If, however, we are right in assuming that natural selection plays but an insignificant part in the development of man under the conditions of civilisation; and if we are right in assuming that the biological evidence for the inheritance of acquired increment of faculty is insufficient; it follows that, unless we assume some mysterious and unexplained inherent developmental tendency, the conditions of human progress must be sought in the evolution of the environment of human achievement, and in the influence of this environment on the individual during his period of greater plasticity. One important feature which distinguishes social evolution from the merely organic evolution which we see among the lower animals is the predominant part which is played by the fittest in raising the level of the less fit. This is brought to bear in two ways; first by bettering the environment, and secondly by bringing every individual in the community within its moulding influence; in short by original work in art, science, and industry, and by education. These are the only conditions under which, so far as we know, social progress is possible. And if, as seems probable, the nature of civilised man is undergoing no improvement, it is assuredly all the more necessary that we should do our utmost to improve his nurture.

Such are some of the conclusions we reach when we apply the principles of evolution under the conditions which obtain in the progress of civilisation. But, after all, supposing our analysis to be adequate and our synthesis duly proportioned, have we done more than indicate the nature of the process in terms of related antecedence and sequence? Does not much remain behind unexplained, and indeed inexplicable by science? If even the fall of a stone to the earth, the formation of a chemical compound, the building of a snowflake, present problems which, after they have been submitted to the solvent action of scientific interpretation, leave insoluble metaphysical residues; if the vital processes of the amœba, the subtle changes in the nuclear-skein of the living cell, the development of a fertilised ovum, involve the play of forces which science must either ignore or accept as data from metaphysics; shall we say that the growth of human ideals—those ideals

without which a rational civilisation is inconceivable—melt in the explanations of science and leave no residues to be dealt with by metaphysics? I endeavored to show in my last essay that psychology in its strictly scientific aspect has no concern with the Will, while for metaphysics the Will is the very heart, soul, and essence of mental development, the underlying cause of the sequences which the psychologist patiently studies with a view to the elucidation of the conditions under which they occur. But if civilisation has any metaphysical meaning it is as the embodiment and manifestation of the corporate will. The spirit of the age is for the metaphysician something more than a mere form of words. It is not fashioned by us; but operates in us and through us. It is of us, its children; we are of it, our parent. It includes us, and without us it is incomplete. It is part of the metaphysical basis of our religious conception of God; and through it God is made manifest in man. But with it alone this conception is partial and incomplete. Not only the Force which makes civilisation possible but that which makes all things possible, which affords the data of all scientific inquiry, is the ultimate synthesis of metaphysical thought. It is the underlying Reason which makes any explanation rational. The man of science, as such, can afford to ignore it; he may well be content to accept things as they are, to note the succession of events and express them in splendid generalisations. But the poet cannot thus rest content; and Wordsworth's invocation touches, with some poetic license, a chord which is nowise inharmonious with the music of Newton or of Darwin.

"Wisdom and Spirit of the Universe!

Thou Soul that art the eternity of thought,

That givest to forms and images a breath

And everlasting motion, not in vain

By day or star-light thus from my first dawn

Of childhood didst thou intertwine for me

The passions that build up our human soul;

Not with the mean and vulgar works of man,

But with high objects, with enduring things—

With life and nature—purifying thus

The elements of feeling and of thought,

And sanctifying, by such discipline,
Both pain and fear, until we recognise
A grandeur in the beating of the heart.
Nor was this fellowship vouchsafed to me
With stinted kindness. In November days
When vapors rolling down the valley made
A lonely scene more lonesome, among woods,
At noon and 'mid the calm of summer night,
When, by the margin of the trembling lake,
Beneath the hills homeward I went
In solitude, such intercourse was mine:
Mine was it in the fields both day and night,
And by the waters, all the summer long."

C. LLOYD MORGAN.

BRISTOL, ENGLAND.

THE NEW BIBLE AND THE OLD.

IN REPLY TO PROFESSOR GREEN.

WHEN the editor of *The Monist* extended to me his invitation to report upon the Polychrome Bible, and to acquaint the educated American public with the methods and aims of this stupendous undertaking, he intimated from the very beginning his intention of obtaining a presentation of the case from the opposing side, and of soliciting some representative of the so-called positive theology for the expression of his views in the matter. The announcement that Professor Green, of Princeton, had declared himself willing to undertake this task filled me with the liveliest satisfaction; for Professor Green enjoys with us also a high reputation as an apologist, and his writings on the *Hebrew Feasts* and the *Higher Criticism of the Pentateuch* have long since been translated into German. The editor regarded it as a matter of course that I should then enter the lists a second time in defence and further substantiation of my views; I so promised, and I am now prepared to redeem my promise. But let me say right at the outset that I have no hope whatever of convincing my esteemed colleague from Princeton. The shafts that I or any other man can aim will rattle harmlessly against his mailed breast, and say what I may, it is sure to be "out of sympathy with the teachings of the Bible from beginning to end." But perhaps after all it will not be an altogether bootless and uninformative task to take this opportunity of explaining again the methods and means by which the biblical apologists and harmonists accomplish their work.

It might appear as if the difference existing between Professor

Green and myself were not a great one. He solemnly repudiates the imputation of being "a foe to biblical criticism"; on the contrary, he is "an earnest believer in the right and the duty of the most thorough and searching inquiry into the origin, the authorship, the trustworthiness and the general character of the books of the Bible. Any light that can be thrown upon these subjects from whatever quarter is to be welcomed." He is also desirous of knowing "the truth and the whole truth"; and he is additionally of the opinion that "the sacredness attached to any volume by ourselves or others is no bar to the most rigorous investigation of everything connected with it." These are principles that the most advanced critics will cheerfully indorse, and in which they will discover their own ideals incarnate. But what are the conclusions to which Professor Green is led by these principles? How does he apply them?

The following paragraph in which Professor Green sets forth the principles of his criticism of the Pentateuch are thoroughly characteristic in this regard. He says:

"If we have trustworthy testimony reaching back to the time when books claim to have been written, and we find that they have been uniformly referred to the date and the author which they assert for themselves, and if moreover they are in accord with their alleged origin and surroundings, we have the strongest possible reason for believing that their statements concerning themselves are true. This is the impregnable base upon which the genuineness of the Mosaic legislation and the Mosaic writings rests. And the speculations of the modern scholars cannot unsettle it."

All this is very well. And if the case actually were as it is here represented we critics should be championing a hopeless cause. But let us look at the facts a little more closely. Granting that we have trustworthy testimony reaching back to the time when the books claim to have been written, when, let us ask, does the Pentateuch claim to have been written? It itself, at least as a whole, never once asserts the claim of having been written by Moses, and even the ancient Church was well aware of this and openly acknowledged it. Junilius Africanus in his celebrated *Instituta regularia divinæ legis* cites the Pentateuch as an instance of a book whose

author was not known *ex titulis et proæmiis*, nor even *ex titulis solis*, but merely *ex traditione veterum*. Nay, the Pentateuch does not even raise the claim to having been written by a contemporary of Moses. In what passages does the author refer to himself as having been an eye-witness? The book is a narrative merely, the author of which never so much as betrays by a single syllable that he is reporting events in which he himself was a participant. And where in the wide world have we so much as a single jot of "trust-worthy testimony reaching back to the time of Moses"? At most it can be nothing more than the Pentateuch itself, and that upon the express supposition that the Pentateuch is the work of Moses. And whence, pray, have we obtained our information regarding the surroundings and the time, or regarding the alleged origin? In spite of the clay tablets of Tell-el-Amarna, and in spite of all the excavations of the Egyptologists and the Assyriologists, that information has again been drawn wholly and solely from the Pentateuch on the assumption of its authenticity. In a word, believing on the strength of a tradition which is absolutely unverifiable that the Pentateuch was written by Moses, we construct on the basis of the Pentateuch a picture of the surroundings and the epoch of Moses; and then for the naturally good and sufficient reason that the Pentateuch is in accord with this picture, it is concluded that we possess in this agreement an "impregnable base for its genuineness." If that is not a veritable gem of the *circulus vitiosus*, there was never a science of logic. And I learn with the utmost satisfaction of the admission made by Professor Green that the "genuineness of the Mosaic legislation and Mosaic writings" rests on this base, for in that event we critics have for the present nothing to unlearn.

This is the way the case stands with the "base." Let us now see how it stands with the superstructure. Professor Green's canon reads: "It is only necessary for the reader to put himself in sympathy with the writer to find all plain and natural." Verily, *Difficile est satiram non scribere!* If a person is bent on believing and blindly accepting everything he reads, assuredly there can be no room for contradictions and differences of opinion.

Professor Green censures us critics—for it is the point of view and not the person that is involved—with undertaking “to measure ancient records by modern ideas,” whereas it should really be our duty “to apply the standard of the ancient writer.” We critics proceed, I admit, on the assumption that a biblical author when he says a actually means a , and in our turn we charge the apologists with applying to biblical things a standard made of India rubber which admits of being stretched or contracted to suit the emergencies of the individual case, with the result that what an author has written as a is sometimes taken to be $2a$ and sometimes $\frac{a}{2}$.

As the first effusion of my subjective bias and of my incompetency to apply biblical standards, Professor Green contests the conclusions which I have drawn from the data given in Genesis regarding the ages of the patriarchs; and he contends that for an author who suffered his characters to live to the age of one hundred and eighty years, seventy-one years, and one hundred years were altogether different periods of time from what they are in the case of men who normally live to be only eighty years of age. But what shall be said to this when it is learned from Genesis xi. 14–17, that Salah, who lived 422 years in all, begot his first son at 30 years of age, and that Eber, who lived 464 years in all, begot his first son at the age of 34? By Professor Green's standard, this would be tantamount to saying that with us a boy of six could become a father.

And is my estimate of Abraham's hundred years really unbiblical? If there was ever a man with a blind faith in the trustworthiness of the Old Testament traditions, it was the Apostle Saint Paul; and has Professor Green never read carefully the Epistle to the Romans? Saint Paul there says, Romans iv. 19, “He considered not his own body now dead when he was about an hundred years old.” I take it that the words “his body now dead” are unmistakable. If the Apostle Paul was not competent to measure biblical things by biblical standards, then surely we critics may be excused for not being able to do so.

But the affair assumes a more critical aspect still. Even Professor Green's Moses does not do him the favor of thinking by biblical standards. For what does he himself recount after God

had announced to the ninety-nine year old Abraham the birth of Isaac? "Then Abraham fell upon his face and laughed, and said in his heart: shall a child be born unto him that is an hundred years old?" (Genesis xvii. 17.) Who has reasoned by Bible standards in this case, Professor Green or I? In a word, to avoid being compelled to admit that the narrative in Genesis xxv. 1-4 does not stand in its proper place in our present Pentateuch, Professor Green gives the Apostle Paul, nay even Moses himself, the lie. Certainly, one cannot ask for more. Instinctively the saying of Lessing is suggested to us of the "enchanted œsophagi" of those apologists and harmonists "who are fain frequently to strain at a drop of pure milk and will bolt without wincing pound-weights of flinty pebble."¹

I have also no conception of the methods of the ancient writers. "The Professor overlooks the common usage of good writers to subordinate exact chronological sequence to clearness of narrative." That the writing of history and the writing of chronicles are two altogether different things I am perfectly aware, as I am also that the pragmatic historian is not always able to adhere mechanically to the exact chronological sequence. But in connexion with what event does Professor Green make his strictures? In connexion with my interpretation of Genesis xxxviii. We read in Genesis (xxxviii. 1) "And it came to pass at that time that Judah went down from his brethren," etc. Now, for a "good writer" "that time" is the time of which he is speaking, namely, in the present case, the time when Joseph was sold into Egypt (Genesis xxxvii. 36). God forbid! replies Professor Green; at that time Judah had long since parted from his brothers, had married the daughter of the Canaanite, Shuah, had had three sons by her, and of these three sons had already lost Er and Onan who had grown to manhood: only "the affair of Judah and Tamar and the birth of her children" came "to pass at that time"; and he who is of a different opinion "overlooks the common usage of good writers." But unfortunately, in all the preceding narratives Judah is reported to

¹ See G. E. Lessing, *Eine Duplik unter Fünfter Widerspruch*.

be with his brothers: the Judah who in Genesis xxxvii. 12 et seq., was feeding his father's flocks at Shechem and Dothan together with his brothers, had not yet parted from his brothers, had not yet married an Adullamite, and had not yet a flock of his own at Timnath. These are facts, and "the common usage of good writers" is powerless to alter one jot or tittle of them; and the conclusions to be necessarily drawn from them are consequently all substantiated.

The problem presented in Genesis xlv. is also not so easily disposed of. *Scriptura scripturae interpres*, is an old principle of Protestant theology. When in Deut. x. 22 Moses himself says: "Thy fathers went down into Egypt with three score and ten persons"; when it is narrated in Genesis xlv. 5-7, that Jacob set forth with his entire household for Egypt; when the list in Genesis xlv. 8 begins with the words: "And these are the names of the children of Israel which came into Egypt"; when the number of souls in each particular group is given, and at the end seventy souls are obtained as the total, surely one is compelled to assume that the author of this list intended to enumerate the seventy souls of which the migration of Jacob into Egypt was composed. But if the list fails to fulfil these requirements, which Professor Green himself concedes, then to my way of thinking we certainly pay the Bible more respect by assuming that this fragment was the result of an attempt subsequently made to particularise by name the number of souls which tradition had handed down, than we do by entrenching ourselves behind the statement that the list is "substantially accurate" and resting content with the assertion that the persons here named were actual descendants of Jacob, and had actually been in Egypt.

In this I have not mentioned another important difficulty at all. The women too certainly belonged to the "souls" referred to, and verse 7 expressly mentions "the daughters and the sons' daughters" of Jacob along with his sons and grandsons. Nay, the person who has read Deut. x. 22, without reference to Exodus i. 5, would be naturally led to think that the wives also were included in the count, for it is hardly to be expected that the sons of Jacob were all widowers or that they took only their children with

them into Egypt and left their wives behind them in Canaan. And even by the standard of Exodus i. 5 it is scarcely likely that Asher alone of all the sons of Jacob had a daughter; yet besides Dinah, whom from Genesis xxxiv we know to be the daughter of Jacob and of Leah, the list mentions Sarah, the daughter of Asher, only. It seems, in fact, to be the fate of the apologists that they should be bent solely on rescuing the letter by a hair's breadth in the individual case, quite unconcerned as to whether they are not thereby working irreparable injury to other passages. On this point, as a "harmony of waxen noses"¹ Lessing in the connexion above cited has uttered some extremely pertinent remarks.

I have also to number among the apologetic subterfuges of this character, the desperate course which Professor Green takes when, in endeavoring to escape the uncomfortable conclusions of the text, he declares the entire chronological and genealogical conception of Genesis v. and xi., to be "a mistaken interpretation," and would take the words: "Shem begat Arphaxad; Arphaxad begat Salah; Arphaxad begat Eber, etc." to mean: "Shem had a son who was the ancestor of Arphaxad, etc." In doing this, he places himself not only at direct variance with the unmistakably lucid tenor of the text, but also with the entire Jewish and Christian tradition. For granting even the possibility of such a conception of biblical genealogies, still Professor Green overlooks the fact that the two genealogies in question are distinguished from the remaining biblical genealogies by a specifically characteristic mark. Why is the age mentioned each time at the birth of the first-born? Is there any interest, either from the point of view of soteriology or of biology, in knowing how old Arphaxad was at the birth of Salah or one of his forefathers, or how old Salah was at the birth of Eber or one of his forefathers? Surely, no other intention could have been predominant here than that of constructing a consistent and flawless chronology.

Considering Professor Green's rigid adherence to the letter, and the possibilities of interpretation of which the language in

¹ In German "a waxen nose" means generally something elastic and pliable.
—Ed.

question admits (for the two Hebrew words נָעַר and יָלֵךְ are really equivocal and indeterminate), I am unable to furnish him positive proof that the Ishmael of Genesis xxi. 14 et seq., cannot be regarded as a young man of seventeen years or that the Benjamin of Genesis xlii to xlv cannot be considered as the father of a family and well along in the thirties. The person who does not feel and believe this, simply does not feel and believe it. But when Professor Green points out that I myself acknowledge Benjamin to have been far along in the thirties at this period, this is of course to be taken as applying only to the chronology of the priestly narrative, and under no circumstances to the expositions of the Jahvists and Elohist.

I am not at all disposed to place so low an estimate upon what the "superficial reader" (I had almost said the unprejudiced reader) thinks on reading the Bible. If, for example, the "superficial reader" of Genesis on reading the passages xxv. 7-10 and xxxv. 28-29,—and these are precisely the passages with which the "superficial reader" is supposably concerned,—should ask how it could be possible that the Ishmael who had long previously been cast forth from his father's house, and was dwelling in the desert on the boundary of Egypt, and the Isaac who had long previously taken up his habitation in Beerlahai-roi, should suddenly make their appearance at the burial of Abraham in Hebron, I should be exceedingly curious to know what reply Professor Green would make to the question.

And while we are upon the Pentateuch, I shall dispose of the remaining problems at issue here, at once.

Considering the facts (and I take but one instance from many) that in Deut. xviii. 3, the shoulder, the two cheeks, and the maw of the offerings are exacted as the portions of the priests, and in Exodus xxix. 27 et seq., Leviticus vii. 32 et seq., x. 14 et seq., Numbers vi. 20 and xviii. 18, the right thigh and the breast are exacted, I for my part am quite content to abide by the "confusion and error" which arise from assuming "separate strata" in the legislation.

My indignation at the Jacob of Genesis xxx. and xxxi., thinks Professor Green, is directed to the wrong place. It is quite true

that Jacob commits his real offense in Genesis xxx., and it never occurred to me to attempt to palliate it. Nevertheless, I can understand it quite well as a step taken in self-defence in the struggle against the wiles and treachery which Laban had so uniformly practiced toward Jacob. The shocking feature for me is contained in the hypocrisy of Jacob's account in Genesis xxxi. But Professor Green thinks I "miss the very point of the whole narrative" in so doing, for though in point of fact Jacob had uninterruptedly carried on his fraudulent manipulations with the rods, and had accomplished by this means the end that he sought, an angel afterwards appeared to him in a dream, and informed him that his successes were not due to the peeled rods but to "divine interference in his behalf"; and thus he is "cured of his error," and can say to his own wives with a clear conscience: "God hath taken away the cattle of your father and given them to me."

The first consideration that I should adduce here in reply to Professor Green is, that from a strictly theistic point of view nothing whatever takes place without "divine interference,"—the purely mechanical action of natural law or forces is deistic not theistic,—so that ultimately every criminal might legitimately justify his conduct by saying that God did it. The question is simply this: does the story of Genesis xxx. 37 et seq., itself impute the result effected to Jacob's peeled rods, or not? And on this score I am fortunately in the position to appeal to an authority in which Professor Green is certain to repose more confidence than he does in me. I possess a copy of the official edition of the English Bible, printed by the British Bible Society, which gives at the head of each chapter a brief synoptic statement of the contents. And what do we read here in the case of Genesis xxx? "37 Jacob's policy whereby he became rich." Even for the official Bible of the English Church, then, (in my copy I find on the title-page the words: "Appointed to be read in churches,") the peeled rods of Jacob were actually the means by which his vast holdings of cattle were obtained; and on the assumption of the unity of Genesis there is no escape from the conclusion that the speech in Genesis xxxi. 5-9, is an infamous piece of hypocrisy.

I most emphatically protest against the assertion that the partition of the sources is injurious to what is essential and important from a religious point of view in the Bible. Professor Green instances the life of Abraham. Now, what is there in this story that is exemplary and dear from a religious point of view? That Abraham has implicit trust in God, that he yields implicit obedience to God, that amid the most harassing circumstances, in trials and tribulations, in temptations and doubt, nay in defiance of all human probability, he never once loses confidence in God and his promises, and so is ultimately made the recipient of the divine blessing. But that is precisely the important point with the Jahvists and the Elohist also, taken by themselves: the priestly narrative, however, furnishes on this head purely chronological statements, which are perfectly indifferent from a religious point of view. It is absolutely valueless from a religious point of view to know how old Abraham was when the various single events of his life took place, and how many calendar years his probations lasted. I can as little believe that the story acquires its entire "beauty and impressiveness" from these facts as I can that the story of the resurrection of Jesus would be enhanced in value by our knowing exactly how many hundred weight and fractions thereof the stone weighed that lay before the sepulchre of our Lord.

One brief word as to Joshua and Samuel. "When all the people were passed over Jordan, the Lord spake unto Joshua, saying: Take twelve men out of the people. . . . And Joshua said unto them: Pass over before the ark of the Lord your God into the midst of Jordan." So runs the passage in Joshua iv. But the ark of the covenant had passed over into the Jordan before the people, and had been set up in the midst of the river; and it was not until afterwards that the Israelites "passed over on dry ground, until all the people were passed clean over," as reported in Joshua iii. The mere statement of this fact is sufficient to refute Professor Green's declaration that "it is hard to see how any intelligent reader can find difficulty here, or what advantage can be derived from splitting this plain and consistent narrative into two conflicting accounts."

I am quite well aware that everything can be explained by

"immediate divine intervention," but what reason can Samuel have, in 1 Samuel x., for causing lots to be cast at all? Was the casting of lots the only method of electing a king? Would not Israel have accepted his mere word,—the word of "the true prophet of Jehovah,"—that Jahveh had in the meantime given him a token that Saul was the right man for the place?

And the Saul of 1 Samuel xi. is the formally elected, solemnly acknowledged king of Israel, who is greeted with loud rejoicings by his people? Let it be granted even that the messengers from Jabesh had proceeded only to Gibeah and had stated their purpose of seeking help in all the coasts of Israel, in order to deceive the Ammonites regarding the fact that Israel, like the other nations, now also had a king. Why, on this supposition, did they not ask for the king immediately on arriving in Gibeah; and when finally Saul actually makes his appearance, why do they not hasten towards him with the supplication, "Help, O King!" (Compare 2 Samuel xiv. 4, and 2 Kings vi. 26.) But Saul is first constrained to ask why the people weep, and the people then tell him the tidings of the men of Jabesh. Is this the fashion in which ambassadors execute their commission to a king, even among the most primitive peoples?

And now as to Chapters xvi. and xvii. The armor-bearer, the personal adjutant of the king, betakes himself to his home, remains away so long from the court that he is completely altered in appearance, does not return to his post on the breaking out of war to accompany his king to the front, but loiters about on the outskirts of the camp with the intention of visiting his brothers, by whom he is savagely upbraided as having come for the mere idle purpose of witnessing the battle, and as having had no business whatever with the army. And this same person represents himself to the king as a man who had never borne sword and armor, so that it would seem as if the two were designedly playing at hide-and-seek with each other. But of course everything is possible with Saul, for his disorder was an incalculable one, and in the case of a man who is absolutely irresponsible for his actions one is not supposed to be surprised at anything, not even at what transcends the bounds of reason. I had, I admit, not thought of "how far Saul's malady

might have affected his memory," but it is a question not of Saul alone but also of that mentally and physically sound man Abner, who as the commander-in-chief of the army could not have helped knowing the personal adjutant of the king. For even Abner himself says: "As thy soul liveth, O King, I cannot tell." Is it possible that in the short space of time during which the kingdom existed that honest and stout-hearted old warrior, Abner, could have developed into so consummate a Polonius as to affirm by a solemn oath that the cloud which the king in his insanity declared to be a camel was in reality a camel!

And how does Professor Green explain the difficulty of fact involved in 1 Samuel xvii., namely, that according to the express statement of 2 Samuel xxi. 19, the giant Goliath of Gath was slain in the wars with the Philistines during David's reign, by a Bethlehemite named Elhanan? And has it never been a source of difficulty to him that the Greek Bible in 1 Samuel xvii. and xviii. has left out entire passages? And as to my "splitting" of the books of Samuel, sufficient proof that I have made nothing that is either injurious or inconsistent out of them will doubtless be furnished by my portraiture and characterisation of the two first kings of Israel in my *History of the People of Israel*.

Professor Green is pleased to see that I entertain no Utopian ideas of the Rainbow Bible. I must decline with thanks all congratulations on this score, for that is something no man of science would do. When he complains that the Rainbow Bible does not represent the opinions of the school, but only those of the individual collaborators, it is to be remarked that scientific schools are not like regiments, in which every man wears precisely the same uniform, or like monastic orders, in which every individual is bound to precisely the same rules. Where they are such, they have missed their purpose and are unworthy of science, the very life of which is freedom, and in which no other person can think for us, but every one stands on his own footing. That which unites the schools is merely the sameness of their methods, and the agreement of their fundamental conceptions. The talent entrusted to him each one has to put out to usury on his own account, that it

may increase and be productive of gain. Scientific work is undertaken only by those who believe they have something distinctively their own to offer, something new; by persons, in short, who believe themselves able to advance science. He who rechews the cud of what the school has already said, is like the slothful servant who hid in the earth the talent entrusted to him. Every scientific work, therefore, is in some measure subjective, because even the man of science can say only what he believes to be true. That person has done his whole duty who has honestly aspired for the truth, and investigated it according to his powers. On this point, too, we have a superb utterance from Lessing: "Let every man speak out what seemeth to him truth, and *the truth itself* may be commended to God!"

Green's comparison of the Rainbow Bible to a map is exceedingly clever; but are we to cease making maps because the boundaries of countries are liable to change? One could never write a text-book on this principle; for every scientific text-book is liable to become antiquated over night through some new and unexpected discovery.

I concede too that the Higher Criticism is liable to error and that it actually has erred. But a man who would for that reason abjure criticism altogether is like a person who would refuse to use railways because trains are liable to run off the track. Science, too, is a gift of God,—one of the three, religion, art, and science, which first make men of men, and form the foundation of their commanding and God-like position in nature. Even the gifts of God may be misused; but that we should use them to the honor of Him who has given them, that is His will. We critics seek the honor of God by our work on the Bible. The Bible is to us a document of religious history, the collection of the records of His revelation to humanity, which we honestly strive to understand, and to understand further simply as historical religious records; we seek to bring them to utterance, and we hearken to their utterances with the most affectionate devotion. Only, we believe that in these records written by men for men, God spoke to us in the language of men. They are venerated and sanctified for us, yet at the same time they are like dear friends, who feel with us and with whom

we feel, whom we cherish and to whom our relations are personal and heartfelt. The apologists, on the other hand, make of the Bible a fetish, to whom sacrifice upon sacrifice must be made, and whose features can inspire only fear: but "there is no fear in love, but perfect love casteth out fear" (1 John iv. 18). And that the Rainbow Bible has the power and the mission to promote this "perfect love" without fear and to diffuse it broadcast over the world, I am certain; and so let it go its way ' by honor and dishonor, by evil report and good report' (2 Corinthians vi. 8), and find entrance to right many hearts who will accept with joyful gratitude the divine truth whenever offered to them in plain and intelligible form.

BRESLAU, November, 1899.

C. H. CORNILL.

POSTSCRIPT.

The sad news of Professor Green's death has just this moment reached me. I have assuredly no need of saying that my article would have taken a different form, could I have forefelt or known in any way of this sorrowful event. Professor Green has now passed away, passed from believing to seeing. He knows that there has never been a thought on my part of combating him personally; that I have written simply in defence of a cause which to me is a sacred one, and of which I have felt myself a chosen advocate; and that I did so, merely in order to repel an attack which in spite of the utmost recognition I can give of the rectitude and probity of my opponent, I could not leave uncontested. Professor Green, now that he has been taken from this earthly life, as well understands and appreciates my position as I have always understood and appreciated his. With heartfelt sorrow, I lay a wreath on his new-made grave: for he battled manfully for a conviction that was sacred to him, that is sacred to many millions and will remain so for a long time to come. Not that which a man has done constitutes his worth before God, but that which he has desired to do and the manner in which he has done it. And Professor Green's endeavor was pure and his deed stainless.

BRESLAU, February 17, 1900.

C. H. C.

LITERARY CORRESPONDENCE.

FRANCE.

THERE lie before me three important works treating sociology or history, which I am glad to be able to group together because the criticism of each will be illumined by the presence of the others. I shall begin with that of M. AD. COSTE, *Les principes d'un sociologie objective*.

M. Coste is vigorously opposed to the popular doctrine of the day which tends to confound sociology and psychology. He makes a sharp distinction between the facts of sociology and the facts of psychology,—for instance, moral, æsthetic, etc.; the latter in his mind constitute a distinct and ultimate science, ideology, which would be built upon sociology, instead of preceding it.

In order to achieve this separation he has deemed it necessary to establish two points in advance: that ideologic phenomena are of a different order from sociological phenomena, and that there is no evident correlation between the two. This thesis is open to discussion, as it seems to me, at least the second part of it, though this does not prevent me from recognising that certain authors, Taine, for example, exaggerated the extent and the nature of this correlation, or failed to understand it properly. M. Coste declares that sociality is a condition precedent of mentality; he even assigns to "opinion"¹ an essential value in the functions of society, no less than to government and production. Now if we take the trouble to analyse carefully this "social condition" of mentality, shall we not

¹ That is, *croyance*, or the sum-total of ideas common to the individuals of a nation.

finally discover vital and perhaps constant relations between a given social state and the intellectual manifestations revealed in it, of which "opinion" is but one aspect? And if it is also true that these manifestations can often be traced to a general, or superior, evolution, going on outside of, and as it were above, individual societies, must they on that account be regarded as exempt from the investigation of sociology? Granted that its principal task—and M. Coste admits it to be so—consists in showing how the various series of social facts vary in function, it is not clear why the series of intellectual phenomena would not be studied from this point of view, and their exclusion from the domain of sociology does not seem to be adequately justified by the danger we would be in of exaggerating the importance of their influence upon social life, which is as unquestionable as their dependence. It was not necessary, in my opinion, to deny the correlation of intellectual facts and social facts in order to separate sociology from ideology. The latter maintains its independent existence in the midst of the former by right of its results—such as "opinion," of which the author discourses,—not by its theoretical discipline. As for the strictly psychological theory of religious, moral, æsthetic, or scientific facts, it pursues an object which no more concerns sociology than does the object of individual or general physiology.

The second characteristic feature of M. Coste's doctrine is that it brings into relief an objective social fact, that of population, which here assumes a new and important rôle. He regards it as the social motor, in other words, the dominant fact, on which in the last analysis depend government, "opinion," production,—"the fundamental and initial phenomenon" in the midst of every people, which will determine its "progressive diversification."

The importance of population is not to be denied, and M. Coste is justified in emphasising it; at the same time he supports it with serious evidence. But I should hesitate to accept it as a factor of absolutely primary importance; and, while the fortune of a people depends on its population, the condition of the population is not for all that a fortuitous circumstance without connexion of any kind with habitat, national character, or last of all, with profound ethnic

qualities. Suppose the population of Spain to be transported to England and distributed there in the same limits and conditions that the Anglo-Saxon genius has established, what would be the result? Does density of population bring about the same results in China and in Belgium? Similar suppositions, which could be extended and stated further, reveal an unknown quantity in our problem. I do not hesitate to add that "moral causes," summarised by M. Coste under the head of "opinion," have also had, at least in certain stages of history, a greater importance than he concedes to them. And in the situation to-day of France and England respectively, population does not seem to me to express the predominant phenomenon. Hence I judge that it is one factor among others, the correlation of which with the various social manifestations should be studied with care; but I would not attribute to it such a decisive rôle and so decidedly privileged a rank.

Is it indeed really essential to the constitution of a positive sociology to make progress dependent on the succession of intellectual states, with Comte, or on the occurrence of men of genius or on the discovery of the arts and technical processes, with MM. Tarde and Espinas, or finally, on the objective reality invoked by M. Coste? I think not; and in any case, whoever desires to formulate this "essential determination of social evolution" of which he speaks, must certainly look beyond the element of population. But then we approach a problem of general philosophy, and no longer one of sociology proper.

* * *

M. TARDE is still the protagonist of the psychologic theory combated by M. Coste. I am sorry that he did not take the trouble to include a *résumé* with his new book, *Les transformations du pouvoir*, and I wish that the style of it were more precise. He has undertaken here to show the application of his general doctrine to the governmental side of society; he has tried to explain the changes of political conditions by means of the laws of imitation, repetition, and opposition, and to derive these changes from individual considerations, which are in his view the true matter of history.

Cournot conceived historical development as an order achieved

in disorder, as the harmonious assimilation of a series of chances grafted one upon the other; but M. Tarde thinks that he failed to recognise their proper nature, which is that of individual initiatives. As for the regular or co-ordinated side of social facts, he thought he found it in certain vague general tendencies, whereas, according to M. Tarde, regularity appears strikingly only in the minor details of the facts of social life, "in those almost identical repetitions of perfectly similar acts and ideas which, starting from a given initiative radiate in all directions, colliding or combining with different rays emanating from other centers."

No one will deny that the individual is, in the last analysis, the social motor. But does it follow that psychology can offer a substitute for sociological investigation, as I have often attempted to define it in these pages and even in this very article? When it is said, for instance, that power follows property, this is the expression of an objective relation, and the establishment of such a fact has a value in practice as well as in theory. It is an entirely different matter to derive from this, as does M. Tarde, the rôle of imitation, and to mark the accession of inferiors to power by the psychologic trait, that "they are more closely assimilated to their masters by imitating them." This trait concerns the moral mechanism of the operation, but it does not appertain to it as a political fact.

Furthermore, M. Tarde criticises, somewhat briefly, the established relations of property and power. While it is difficult—we will admit it—always to connect the changes in political form with the modes of possession of soil and capital, it remains true none the less that the hypothesis is not without foundation; and since there is no doubt, as he himself declares, that "if property had not evolved, the evolution of power would never have taken place," it is no less certain that the correlation which we discover in the whole must find expression in the details. In any case, I choose this example only to mark the difference between the study which seems to me to be genuinely sociologic and that to which M. Tarde claims to reduce sociology.

When the author devotes himself to showing us that there ex-

ists "an inverse relation between the political or social influence of the nobility and that of the cities," and that "patriciates decline in proportion as great cities arise," it appears that he is dealing with sociology exactly as we understand it. Let such a relation be disproven, and even then sociology will have a sufficient result independently of the interesting reflexions that may be offered by psychology on the private condition of the individual molecules which make up these social combinations. I note in passing that in the remarkable chapters on Nobility and Capital, M. Tarde is very sparing of psychologic explanations. And if he had explored all the sentiments that move the heart of man in the situations which he describes, what more would we know of these situations themselves considered as social phenomena?

I restrict myself to these few remarks. They do not prevent me from recognising the author's qualities of sagacity and keenness, and I feel that I ought to commend many pages of his book, especially those in which he interprets the law of "progressive differentiation" of powers, or of works, a law which seems to him to mean a division of powers leading to closer solidarity and coöperation; those in which he treats of the increase of authority in modern society; and finally—the practical conclusion of his studies—those in which he shows the necessity and the possibility in the near future of subordinating politics to morals.

* * *

M. D. XENOPOL, professor in the University of Jassy (in Roumania), publishes in French *Les principes fondamentaux de l'histoire*,¹ and I shall make this important work the occasion for discussing the question of the relation of sociology and history, whence come many misconceptions. Moreover, it is the very question treated by M. Xenopol. His criticism is based upon the contrast presented by the facts of co-existence (chemistry, psychology, etc.) and the facts of succession (geology, linguistics, etc.), as well as upon the different value of the results obtained in these two groups of facts.

¹ Paris, E. Leroux; 1899.—Works which appear without publisher's name belong to the Librairie Alcan.

I cannot enter here into the details of the discussion. It will be sufficient to say that, according to M. Xenopol, the historical sciences do not aim to establish relations of similitude and coexistence, as do the other sciences, but, on the contrary, relations of difference and succession. These last-mentioned relations are not laws properly so called, that is to say, the expression of a regularity which is independent of time; and if there are "abstract laws of succession" they are incorporated in "circumstances" which are not "permanent," but always "changing," which modifies the conditions of the problem. In brief, M. Xenopol accepts a static sociology, which is limited to what he calls the "laws of manifestation" of the social facts,—in other words, to the study of the relations which may be discovered at any given moment between events and institutions. But history has the sole right to attempt to establish "regularities in succession"; and these regularities are never the "generalisations of succession" proposed by dynamic sociology, from which are eliminated the "differences" which are the characteristic of historical development; they appear only under the form of historical series, which "always remain unique and individual, unlike in space as well as in time, and consequently have not the character of laws."

M. Xenopol seems to me to fall into confusion. He is filled with the necessity which is imposed upon the historian of (if I may venture to use the expression) localising and individualising human actions; but he commits the mistake of trying to subject the processes of sociology to the necessities of narration. He does not take into account the fact that the conception of sociologic series is as legitimate as that of historical series. These sociological series, these partial evolutions in the intellectual order, the economic order, the juridicial order, the political order, etc., present this especial characteristic, doubtless, that their chief features are most frequently realised in different historical series. But why should the sociologist be forbidden to mark these features and these evolutions across the course of history? Does not the historian find himself constrained to neglect in his account certain "differences" which he regards as secondary? M. Xenopol himself

advises "selecting" those facts alone which deserve to be considered from among the mass of those which constitute the past of humanity. The sociologist does precisely the same thing when he establishes his sociological series. And if, for instance, the transition from polygamy to monogamy seems sufficiently substantiated in the majority of historical series, the announcement of this fact will have for him all the necessary reality without the need of noting the number of wives permitted by the laws of the various nations which practised polygamy. On the other hand, in the special study of the civilisation of Islam it will be important to note the fact that the Prophet of the Mussulmans reduced to four the number of wives allowed to the faithful. By this fact history seems to me to be definitively the concrete part of sociology; it would lose its peculiar physiognomy as soon as it tried to assume another task.

I have not the least intention of disparaging history by this remark, and I concede that it even has an important function of its own: I mean the discussion of events, the appreciation of historical personages, the estimate of their personal influence upon the course of the national life, etc.,—a work of literature and criticism in many respects, a sort of half fictitious reconstruction of reality, which on the whole assumes a real value only in the hands of the historian who is at the same time a philosopher. M. Xenopol certainly has this qualification, and he gives the best of advice on the difficult art of revealing and criticising the facts of history. But he himself furnishes an example of the extent to which the judgments of the mere historian are uncertain and debatable, when he attributes the fall of Napoleon to the play of chance, the winter of 1812. The sudden death of Pericles, stricken by the pest which was spreading from Asia to Greece, was a matter of chance. But Napoleon, despite his genius, was a player who always ended by losing to the bank conducted by destiny.

* * *

I had intended to speak quite fully of a work by M. PAUL LACOMBE, *De l'histoire considérée comme science*,¹—a work which dates

¹ Hachette & Co., publishers.

from 1894, but the analysis of which is in place here, because it contains doctrinal views that are shared or opposed by the sociologists whom I have just been discussing. I would gladly have noted the personal views of the author on the subject of imitation; gladly have given a *résumé* of his discussion of contingency and determinism in matters historical, that is to say, the degree of certainty permitted by accidental or narrative history, or, in short, by the history of events; gladly have examined his objections to the notion of race; have emphasised, finally, his conception of progress, quoting his wise warning against trusting in the existence of a lucky fate which will carry us forward by itself. But I must ask pardon if I merely refer to his excellent book, without examining it in detail as I would have liked to do. If I do not accept all his conclusions without reserve, I can recommend every page of it as instructive and never dull.

I shall restrict myself to mentioning now the following works:

By the same M. Lacombe, an *Esquisse d'un enseignement basé sur la psychologie de l'enfant*,¹ a very good book which may interest American or English readers, although addressed especially to French teachers, being a controversial work, a protest of common sense against the dogmatic instruction which still holds its fell sway in France;—by M. EUGÈNE D'EICHTHAL, *Socialisme et problèmes sociaux*, studies written with great good sense, their common object being to analyse the various forms assumed by contemporary socialism since the expansion of universal suffrage;—by M. OSSIP-LOURIE, *La philosophie de Tolstoï*, a meritorious work in which the author attempts to present the ideas of the celebrated writer in a coherent whole;—by M. H. LICHTENBERGER, *Friedrich Nietzsche, aphorismes et fragments choisies*, a well arranged collection;—by M. FÉLIX THOMAS, *Morale et éducation*, a hasty examination of the recent systems of ethics, undertaken with the purpose of estimating the influence which each may have in the education of children.

LUCIEN ARRÉAT.

PARIS.

¹ A. Colin, publisher.

CRITICISMS AND DISCUSSIONS.

'A STRANGE ATTACK ON SOME PHYSICAL THEORIES.'

Under the above quoted head, in *The Monist* for January 1900, Antonio Llano criticises an article by the present writer which appeared in *The Monist* for October, 1899. Mr. Llano does not discuss the contentions of the article which he criticises; but, after the manner of some controversialists, attempts to discredit the conclusions by apparently absurd conclusions drawn from the premises assumed. His article is devoted to showing that certain theories "are not original with Mr. Chase"; to pointing out "Mr. Chase's great error"; to waving aside, without argument, the "conclusions from formulas the exact meaning of which does not seem to be very clear to him" (Mr. Chase); and to animadversions on matters in regard to which "Mr. Chase seems to be somewhat confused."

In the article which Mr. Llano criticises I am somewhat at fault for not stating that formulas (4), $M = \frac{1}{4}(m+m')(v+v')$, and (6) $E' = \frac{1}{4}(m+m')\frac{(v+v')^2}{4}$, are not general, but particular cases of the general formulas which answer the same purpose in argument and have an advantage over the somewhat involved and complicated general formulas. These formulas, (4) and (6), are true only for the particular case of collision of bodies of equal masses, the case of $m=m'$. The general formulas would be, $M = (m+m')v''$, in which v'' , the velocity of motion after impact, is, in magnitude, $\frac{mv+m'v'}{m+m'}$; and $E' = \frac{1}{2}(m+m')v''^2$, in which v'' is also, in magnitude, $\frac{mv+m'v'}{m+m'}$. Mr. Llano need not to have transformed the formulas to draw his conclusion that the bodies must be equal in mass, or weight; a simple inspection would have told him that.

So Mr. Llano's deduction from "'generalised' formula that all the bodies in the universe have either the same mass or the same velocity, or both the same mass and the same velocity," is a bit of sarcasm which has its fangs drawn as soon as we learn that the formulas were assumed for bodies of equal mass and moving in the same line of motion in the same direction.

Mr. Llano's "equally interesting and astounding conclusion" drawn from the formula, $E' = \frac{1}{4}(m+m')\frac{(v+v')^2}{4}$, upon which he comments facetiously, falls innocent of any damage to the argument which he seeks to discredit. In fact, the for-

mulas are rigorously true, limited to the particular case above stated. Mr. Llano should show how it is possible for both energy and motion to be conserved, on the theory that all energy is but matter in motion, rather than resort to the sophistical method of drawing attention from the main contention by seeking to deduce absurd conclusions from an adversary's premises:

In concluding his *facetae* on formula (6) he says: "This 'Law' can be applied in 'practice' with most wonderful results. Thus, a 10,000-ton man-of-war, hit from beneath by a bullet weighing 2 or 3 ounces, could easily be hurled into the air with a velocity of 1000 feet per second."

I will not comment upon this statement further than to say that this "wonderful conclusion" is quite a vagary of Mr. Llano's imagination, and is as irrelevant to the question at issue as the animadversions of Mr. Dooley upon war, literature, and philosophy.

Again he says: "Mr. Chase further concludes, from some simple mechanical formulas the exact meaning of which does not seem very plain to him, that 'it is evident that kinetic energy is not wholly dependent on matter and motion.' Mr. Chase will not, we hope, accuse us of promulgating 'errors' and 'absurdities' if we tell him that *by definition*, kinetic energy is energy due to motion; indeed the term is often defined by mathematicians as a name given to the product $\frac{1}{2}mv^2$. What would a mechanician say to any one who told him that the velocity of a moving body does not depend upon time and space?"

In this instance also Mr. Llano has drawn an irrelevant conclusion. It is true that there can be no kinetic energy without motion; but the contention is that "kinetic energy is not wholly dependent on matter and motion," not that it does not depend on motion. The contention is that a factor which I will term "mass," or "inertia," is lost sight of in the formula as generally understood, and that this factor is involved in the term m ; that what is commonly designated "mass" is really made up of two factors, the amount of matter and the "mass" as defined by J. Clerk Maxwell. On the theory that kinetic energy is wholly dependent on the amount of matter and the amount of motion, will Mr. Llano explain why two pound weights moving over a unit space in a unit of time have only half the energy of a one pound weight moving over two units space in a unit of time—the second case having but half the amount of matter and the same amount of motion as the first case, yet yielding double the amount of energy? This explanation will count for much more than conclusions drawn from arbitrary definitions. And it will not be out of place here to call attention to Mr. Llano's error in stating the formula for the energy of two inelastic bodies after collision. It is not $E = \frac{1}{2} \frac{mm'}{m+m'} (v-v')^2$, as Mr. Llano states, but is accurately expressed by the more complicated formula, $E' = E - \frac{1}{2} \left[m \left(v - \frac{mv + m'v'}{m+m'} \right)^2 + m' \left(\frac{mv + m'v'}{m+m'} - v' \right)^2 \right]$. For a full discussion of which subject, consult Thomson and Tait's *Treatise on Natural Philosophy*, Vol. I., pages 219-327.

Again Mr. Llano objects to the argument drawn from the parallelogram of

forces, saying that the resultant would be a parabola and not a straight line, in case of a force impressed at right angles to the line of motion of a particle. His statement would be true in case of a force gradually impressed in a direction constantly parallel to a normal to the original line of motion of the particle. But if the forces are impressed simultaneously on the particle and in lines at right angles to each other; or in case of a particle moving uniformly in a straight line and the instantaneous impression of a force at right angles to the line of motion of the particle—the impression of an infinite force in an infinitesimal period of time—the resultant is a straight line, the diagonal of the parallelogram of forces. In either of these cases the kinetic energy of the particle would be changed. It is, of course, true that, given a particle moving uniformly in a straight line and a force be impressed upon it continuously changing in direction so that the line of direction of the force shall be constantly normal to the line of motion of the particle, it would move with unchanged velocity and energy in a circle, an inwinding spiral, or an outwinding spiral, as the force is constant, increasing, or decreasing. This, however, is a particular case of a general problem.

If Mr. Llano, or any other defender of the proposition, for that matter, wishes to defend and maintain the position, "that all phenomena can be reduced to matter and motion," it will devolve upon him to explain away the difficulties pointed out in the article of October 1899, in *The Monist*, under the heading, "The Doctrine of Conservation of Energy in Its Relation to the Elimination of Force as a Factor in the Cosmos." His article in the January *Monist* has not even touched upon, to say nothing of removing, the difficulties in the way of the proposition above stated.

CHAS. H. CHASE.

ITHACA, MICH.

BOOK REVIEWS.

HISTORY OF MODERN PHILOSOPHY IN FRANCE. By *Lucien Lévy-Bruhl*, Maître de Conférences in the Sorbonne, Professor in the École Libre de Sciences Politiques. Chicago: The Open Court Publishing Co. London: Kegan Paul, Trench, Trübner & Co. 1899. Pp. 500. Price, \$3.00 (12s.).

M. Lévy-Bruhl has given us in this handsome and inspiring volume more than a history of French philosophy; he has given us a history of French thought. "Is it not," he asks, "too narrow a conception of the history of philosophy to see in it exclusively the logical evolution of successive systems? Doubtless this is one way of looking at it; but we can understand, also, that philosophic thought, even while having its especial and clearly limited object, is closely involved in the life of each civilisation, and even in the national life of every people. In every age it acts upon the spirit of the times, which in turn reacts upon it. In its development it is solidary with the simultaneous development of the other series of social and intellectual phenomena, of positive science, of art, of religion, of literature, of political and economic life; in a word, the philosophy of a people is a function of its history. . . . It is proper, therefore, to introduce into our history of modern philosophy in France, along with the authors of systems distinctly recognised as such, those who have tried under a somewhat different form to synthesise the ideas of their time, and who have modified their direction, sometimes profoundly. Would that be a faithful history of philosophic thought in France which should exclude, apart from the names cited above, those of Montesquieu, Diderot, Rousseau, and Joseph de Maistre? The question is not, as it seems to me, whether they should have a place, but what that place shall be? The reader will see that we have not been satisfied to take half steps, and the question has been settled in this volume in the most liberal spirit."

The book begins with Descartes, who opened a period in the history of philosophic thought, not simply for France, but for the world at large, and we are then led pleasingly along in a charming and appreciative review, abounding in original *aperçus* and acute criticisms, of the works and intellectual environment of Malebranche, Pascal, Bayle, Fontenelle, Montesquieu, Voltaire, the Encyclopædists, Rousseau, Condillac, Condorcet, the Ideologists, the Traditionalists, Maine de Biran, Cousin,

Auguste Comte, Renan, Taine, together with a vast number of subsidiary thinkers. It is mathematics, that, according to Lévy-Bruhl, is the peculiar signature of French philosophy; in nearly every case the studies of the great philosophers began with geometry and analysis (think only of Descartes, Pascal, Malebranche, Fontenelle, D'Alembert, Condorcet, Comte, Renouvier, and Cournot); and hence its predilection for "clear ideas," for "methods," and for deduction as the mode of philosophic procedure. The French philosophers have not been original metaphysicians; they have excelled rather in the philosophy of the sciences, in moral philosophy, and in the theory of classification. Moreover, they have been eminently practical, popular, and unnational, and have appealed to all mankind.

In fine, says the author, "there has been in French philosophy for three centuries a singular persistency of the Cartesian spirit; whether the stamp of the first great modern philosopher was indelible, or whether—which is more likely—Descartes expressed in his doctrine the essential features of the French genius, which caused his influence to co-operate with the tendency of the national temperament. This spirit, which had become predominant by the end of the seventeenth century, was transmitted in the eighteenth through Fontenelle and Montesquieu, prevailed among the 'philosophers,' and even in Condillac, and spent itself in the French Revolution, to be revived in the nineteenth century, modified, but still recognisable, in Auguste Comte. This spirit was wonderfully adaptable to the task of criticism incumbent upon modern philosophy when once out of the Middle Ages and past the Renaissance and the Reformation. The main object was to definitely separate scientific or philosophical speculation from theology, and to overthrow the entire body of institutions based on a historical tradition which was often indefensible, in order to establish in their place a just system. To this work French philosophy was peculiarly adapted by reason of its rational, universal, and humane character, and of its insistence upon logical clearness."

M. Lévy-Bruhl has not neglected living philosophers, and his brief résumé of "the contemporary movement" in French thought contains much information that can scarcely be found elsewhere. All in all, his work is one that appeals as much to the reader of history and literature as to the student of philosophy; it is the story of the development of a great nation's thought, excellently conceived and admirably executed. The intrinsic attractiveness of the book has been greatly enhanced by the bookmaker's art, and its human interest has been heightened by the addition of twenty-three handsome photogravure and half-tone portraits, some of them quite rare. A practical bibliography of works on French philosophy has also been added.

THE THEORY OF THE LEISURE CLASS. AN ECONOMIC STUDY IN THE EVOLUTION OF INSTITUTIONS. By *Thorstein Veblen*. New York: The Macmillan Company. 1899. Pages, viii, 400. Price, \$2.00.

It is the purpose of Mr. Veblen's work to "discuss the places and value of the leisure class as an economic factor in modern life." The institution of the leisure

class, according to him, is found in its best development at the higher stages of the barbarian culture, as in feudal Europe and feudal Japan. It is here that those "invidious distinctions" between classes and employments and that "animus or spiritual attitude" on which the institution of a leisure class rests are seen to their best advantage. The leisure class emerged during the transition from primitive savagery to barbarism. The conditions necessary to its emergence were: (1) a predatory habit of life, and (2) sufficient ease of subsistence to exempt a considerable portion of the community from the routine of labor. In societies distinguished by these two attributes, aggression becomes the accredited form of action. The obtaining of goods by other methods than seizure is accounted unworthy of man in his best estate. No employment and no acquisition is morally possible to the self-respecting man at this cultural stage, except such as proceeds on the basis of prowess, viz., force or fraud. Labor acquires a character of irksomeness by virtue of the indignity imputed to it. The ethics and public opinion of the community at this stage are but the natural and logical expression of these views. "Honorable" connotes nothing but the assertion of superior force, a "honorific" act is a successful predatory act; and the predilection shown in heraldic devices for rapacious beasts and birds of prey is merely the survival of the dominant spirit of this period. The taking of life, the killing of formidable competitors, whether brute or human, is the most "honorific" of all the acts of man, and "this high office of slaughter," says Mr. Veblen, being the expression of the slayer's transcendent might, "casts a glamour of worth over every act of slaughter and over all the tools and accessories of the act." The handling of arms is the "honorific" employment *par excellence*. The handling of the tools and implements of industry is beneath the dignity of able-bodied men.

From this basis Mr. Veblen pursues the main economic aspects of the history of the leisure class from the days of barbarism to the present time. The introduction of ownership into society brings with it another form of strife, viz., pecuniary emulation, and the resultant struggle for still higher "conspicuous leisure" with its attendant "conspicuous consumption." The forms which conspicuous leisure and conspicuous consumption take are illustrated by arguments drawn from everyday life, and are analysed with a clearness which does much toward enforcing Mr. Veblen's views. The pecuniary standard of living in modern society and the pecuniary canons of taste in modern society, dress as an expression of pecuniary culture, industrial exemption and conservatism as a distinguishing mark of leisure, are then interestingly discussed.

The most attractive chapters of the book are those on the conservation of archaic traits, on modern survivals of prowess, the belief in luck, and devout observances, all of which are shown to be survivals, in their most exquisite form, from the barbaric periods in which the leisure castes were instituted. For example, under the heading of "Survivals of Prowess" are mentioned the duel, boys' military organisations, hunting, and certain forms of athletic sports. The chapter on

"Devout Observances" is coldly analytic. Devout habits are regarded as the survivals of an archaic scheme of life which has outlived much of its usefulness for the economic conditions of to-day, and are held to involve the same philosophy of life as the sporting, gambling, or athletic habit. The final chapter on "The Higher Learning as an Expression of the Pecuniary Culture" involves many points of view which should receive consideration. The universities are shown to be largely institutions which support the leisure-class scheme of life, for they involve a notable element of conspicuous waste of time and substance; and their archaic propensities for spectacular effect, their championism of the studies which involve high consumption and low industrial efficiency, their hankering after antique symbols as shown in the recent adoption of cap and gown as learned insignia, their trivialities in points of form and ritual, their excessive encouragement of athletic sports, are all emphasised as social reversions to the barbarian stage.

It is to be remembered, however, that the criticism of existing constitutions advanced in Mr. Veblen's work is exclusively the expression of the economic point of view, and that a multitude of considerations may be advanced for the refutation of certain of his main tenets. Society is not exclusively an economic machine for the production of just that quantity of fodder which is necessary to sustain animal existence, and to ensure the perpetuation of the species; if it were, the lowest forms of life would have to be considered the most successful, and the farthest advanced evolutionally. Society is also an engine for life, and it may legitimately subserve the higher aims and ideals of life, which alone make existence tolerable, even when it appears disjointed economically. Yet Mr. Veblen has written a very interesting work and one which will hold the attention of its readers. T. J. McC.

SOLOMON AND SOLOMONIC LITERATURE. By *Moncure Daniel Conway*. Chicago:

The Open Court Publishing Co.; London: Kegan Paul, Trench, Trübner, & Co. Pp., 248. Price, \$1.50 (6s.).

This latest production of Mr. Conway's pen may be regarded from both a literary and a scientific point of view as the ripest fruit of his long-continued activity in the realm of comparative mythology; and its reading will be invested for every one with an unflinching and uninterrupted charm, no matter what ground of difference one may have with the peculiar tenets, or with the intellectual and emotional prepossessions, of the author.

"There is a vast Solomon mythology," says Mr. Conway, "in Palestine, Abyssinia, Arabia, Persia, India, and Europe; the myths and legends concerning the traditional Wisest Man are various, and merit a comparative study they have not received." Taking this mythology as his text, he proposes "to study the evolution of the human heart and mind under influences of which a peculiar series is historically associated with Solomon's name." He finds running throughout the whole a bifold evolution. He says:

"While in various parts of Europe 'Solomon's Seal,' survival from his magic

ring, is the token of conjuring and fortune-telling imposters, the knightly Order of Solomon's Seal in Abyssinia has been raised to moral dignity by an emperor (Menelek) who has given European monarchs a lesson in magnanimity and gallantry by presenting to a 'Queen of the South' (Margharita), on her birthday, release of the captives who had invaded his country. While this is the tradition of nobility which has accompanied that of lineal descent from the Wise Man, his name lingers in the rest of Christianity in proverbial connexion with any kind of sagacity, while as a Biblical personality he is virtually suppressed.

"In one line of evolution—whose historic factors have been Jahvism, Pharisaism and Puritanism—Solomon has been made the Adam of a second fall. His Eves gave him the fruit that was pleasant and desirable to make one wise, and he did eat. Jahveh retracts his compliments to Solomon, and makes the naive admission that the deity itself cannot endow a man with the wisdom that can ensure orthodoxy, or with knowledge impregnable by feminine charms (Nehemiah xiii.); and from that time Solomon disappears from canonical Hebrew books except those ascribed to his own authorship.

"That some writings attributed to Solomon—especially the 'Song of Songs' and 'Kohelah' (Ecclesiastes)—were included in the canon, may be ascribed to a superstitious fear of suppressing utterances of a supernatural wisdom, set as an oracle in the king and never revoked. This view is confirmed and illustrated in several further pages, but it may be added here that the very idolatries and alleged sins of Solomon led to the detachment from his personal self of his divinely-conferred Wisdom, and her personification as something apart from him in various avatars (preserving his glory while disguising his name), an evolution culminating in ideals and creeds that have largely moulded Christendom.

"The two streams of evolution here suggested, one issuing from the wisdom books, the other from the law books, are traceable in their collisions, their periods of parallelism, and their convergence,—where, however, their respective inspirations continue distinguishable, like the waters of the Missouri and the Mississippi after they flow between the same banks."

These two streams of evolution Mr. Conway then proceeds to trace in all their various ramifications in the folk-lore of Ancient and Modern Judaism, Buddhism, and Early and Modern Christianity. It is a fascinating picture that he has unrolled, and one that he has adorned with all his customary literary art,—for more than "a literary critique" his book does not pretend to be. He says: "The studies and experiences of many years have left me without any bias concerning the contents of the Bible, or any belief, ethical or religious, that can be affected by the fate of any scripture under the higher or other criticism. But my interest in Biblical literature has increased with the perception of its composite character ethnically. I believe that I have made a few discoveries in it; and a volume adopted as an educational text-book requires every ray of light which any man feels able to contribute to its interpretation."

The titles of his chapters are as follows: (1) Solomon; (2) The Judgment of Solomon; (3) The Wives of Solomon; (4) Solomon's Idolatry; (5) Solomon and the Satans; (6) Solomon in the Hexateuch; (7) Solomonic Antijahvism; (8) The Book of Proverbs and the Avesta; (9) The Song of Songs; (10) Koheleth (Ecclesiastes); (11) Wisdom (Ecclesiasticus); (12) The Wisdom of Solomon; (13) Epistle to the Hebrews (A Sequel to Sophia Solomontos); (14) Solomon Melchizedek; (15) The Pauline Dehumanisation of Jesus; (16) The Mythological Mantle of Solomon Fallen on Jesus; (17) The Heir of Solomon's Godhead; (18) The Last Solomon.

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ELEMENTARE ARITHMETIK UND ALGEBRA. Von Dr. Hermann Schubert. Leipzig: G. J. Göschen. 1899. Pp. 230. M. 2 80.

ALGEBRA. Mit Einschluss der elementaren Zahlentheorie. Von Dr. Otto Pund. Leipzig: G. J. Göschen. 1899. Pp. 345. Price, M. 4.40.

ELEMENTE DER STEREOMETRIE. Erster Theil: Die Lehrsätze und Konstruktionen. Von Prof. Dr. Gustav Holzmüller. Leipzig: G. J. Göschen. 1899. Pp. 383. Cuts, 282. Price, M. 5.40.

In comprehensiveness, rigor, and practical adaptability to scientific needs, the "Schubert Mathematical Series," issued by the enterprising house of Göschen, of Leipzig, bids fair, from its prospectus, to rival any existing series of text-books. The "Sammlung Schubert" is designed to embrace in a perfectly systematic and unitary fashion the entire province of practical and theoretical mathematical exposition. Some twenty odd volumes have already been announced in all the branches of geometry and analysis, including a history of mathematics by Dr. Robert Haussner, and not omitting treatises on such subjects as Insurance, Probabilities, Theoretical and Applied Mechanics, etc. The presentations are all to be the work of competent authors, and the promise is made that they will in every respect meet the present-day requirements of mathematical research,—a promise which the three volumes listed at the head of this notice have fulfilled.

Dr. Schubert's presentation includes all of elementary arithmetic and algebra, except geometric series, the theory of compound interest, higher arithmetic series, combinations, the binomial theorem, probabilities, continued fractions, indeterminate equations, binomial and cubic equations,—subjects which he has reserved for a forthcoming volume devoted to *Niedere Analysis* or to what we might term Collegiate Algebra, being the analysis strictly necessary for taking up the calculus, Dr. Schubert has performed his task skilfully. It is done in the manner which is well known to those familiar with his other text-books. The exposition is much condensed and restricted entirely to matters involving questions of principle. The chief stress is laid upon operational symbols and laws, and upon the logical and systematic development of the entire system of arithmetic from a few fundamental ideas (association, distribution, etc.). The book is not overloaded with examples, but contains just the adequate number. Historical remarks have been appended.

Dr. Pund's *Algebra* deviates widely from the type of the ordinary algebraic manual. It is designed to occupy an intermediary position between this type and such works on advanced modern algebra as the large text-books of Weber, Netto, and Serret. Its points of view are those of relatively recent abstract research, and it leans with predilection to the purely formal and non-visualisable propositions of the theory of numbers. The doctrine of "groups," which is now ubiquitous in mathematics, receives special consideration, as does that of "systems of moduli," as developed by Dedekind and Kronecker. The theory of "linear congruences" is treated, and its superiority as a method of resolution over the old procedures exhibited. Determinants are expounded upon the analytic basis furnished by Kronecker, and discussed in connexion with systems of linear equations. Finally, the science of algebraic forms and functions, as thus developed, is applied to the theory of equations. The remaining subjects considered are the "Divisibility of Integral Numbers," "Permutations," "Divisibility of Integral Functions," "Quadratic Residues," "Resultants, Discriminants, and Elimination." It will be seen from this *résumé* that Dr. Pund's book will fill what to many has been a real gap in text-book literature.

Even more may be said of the splendid and complete work on the *Elements of Solid Geometry* which has been given us by Dr. Holzmüller, director of the Technological School at Hagen, and author of a mathematical series accredited and used in the schools of Prussia. This work of which the first volume has appeared, will treat elementary geometry of three dimensions from the point of view of modern research entirely, and will supply the chief deficiencies in material of such standard and excellent works as Baltzer, Schlämilch, Geiser, Reye, Heinze-Lucke, and others. Some of the subjects thus treated and omitted in some one or in all of the afore-mentioned works are, for example, the conic sections and the conical surfaces in projective geometry, Dupin's cyclides, the curvature of surfaces, poles and polars, duality, inversion, stereographic projection, affinity, collineation, cartographic representation, etc., etc. One special feature is the chapter devoted to *stereometric drawing*, where even Kepler's and Poinot's solids are dealt with, and stereoscopic representations given of the dodecahedron and icosahedron. Correct drawing, indeed, is insisted upon as an indispensable pre-requisite for constructive exposition, and the 282 figures of the book are themselves exemplars in this regard. Not the most unimportant parts of the book are the brief but interesting historical and bibliographical notes. The typography, like that of the other two books, is especially clear and satisfactory, and will go a great way toward recommending the series.

DISCOURSE ON METHOD. By René Descartes. Chicago: The Open Court Publishing Co. Pp. 87. Price, paper, 25c.

The present little volume constitutes number 38 of the Religion of Science Library and is an authorised reprint of Dr. Veitch's well-known translation. Des-

cartes' *Method* is one of the classics of the history of philosophy, and is, both by its brevity and spirit, preëminently adapted to serve as an introduction to the study of modern thought. With Hume's *Essay*, and Kant's *Prolegomena* it contains more food for genuine creative reflexion than can be gained from the tomes of epigonic technical philosophers of twenty times its size. It is republished in this cheap form to make it accessible to every reader. The publishers have added a brief biographical appreciation of Descartes, and a working bibliography of Descartes-literature. A handsome half-tone reproduction of Franz Hals's portrait of the great philosopher adorns the little volume as frontispiece. μ.

NEW PLANE AND SOLID GEOMETRY. By Wooster Woodruff Beman, Professor of Mathematics in the University of Michigan, and David Eugene Smith, Principal of the State Normal School at Brockport, New York. Second revised edition. Boston: Ginn and Co. 1899. Pp., 382.

We are pleased to see this second, revised edition of Beman & Smith's Geometry. It is an evidence that the efforts of our most advanced and enlightened educators are receiving their adequate appreciation at the hands of the pedagogic public. The best theoretical endeavors of Germany, France, England, and Italy are here combined with characteristically practical American points of view which lead us to believe that in matters of education we have in the last decade or two been doing work which in the end shall leave us in actual cultural results behind no other nation. We can point, both in this and in other domains, to recent American text-books that, despite our ancient and proverbial shortcomings, still show that the talents entrusted to us have not been given in vain. It is more than a shrewd eclecticism, profiting by the accumulated treasures of European thought, that has inspired that genuine *Aufschwung* of educational effort in modern America which has become so signal a feature of our present life; and we shall not be surprised if the fruits of it react with interest upon the sources whence it has been derived.

The present work is a compromise between the traditional treatment of Euclid and Legendre, and the more natural and heuristic methods of the modern geometers. In the text, the authors have adhered to the ancient, the formal, and the logical method of exposition; in the definitions and the discussions they have made use of the more appropriate and the more realistic machinery of modern research; while in the exercises and examples they have supplemented in so practical a manner the matter of their text as to leave little to be desired from the point of view of a sound evolutionary instruction.

On the appearance of the first edition of this book, we were, we must confess, sceptical as to the pedagogic value of many of its innovations,—especially with regard to certain features of its notation and symbolism,—but since then our doubts have been dispelled by actual experience; and we are of the opinion that supplemented by the tact of a competent and adaptive teacher (and here lies the rub in elementary instruction) this type of text-book will be found to meet the really neces-

sary requirements. Personally, we believe in a *genetic* geometry, developed from the individual (infantile and mature) formal experience of every person, agreeing with the racial and cosmic experience, forming a part of one's total mental life, and not constituting a forced, transitory, and factitious episode of a High-School sojourn, from which nothing remains but the mazy congruence of a couple of stale, flat, and unprofitable triangles, a Pythagorean proposition, and the memory of a grand intellectual opportunity that has been lost. We may leave to the minds of maturity, the magnificent formalism and logic of Euclid, worthy scion of Plato and Aristotle, whose gods even "arithmetised"; but let us give to our children a live acquaintance with that real world of forms which is open to us all in our every-day life and from which the great predecessors of Euclid too drew; and the catalogue of the Archimedes, the Monges, and the Jacob Steiners, shall be swelled beyond credibility.

For details we must refer to the work itself. The second edition is formally and typographically a vast improvement on the first. T. J. McC.

THE EVOLUTION OF GENERAL IDEAS. By *Th. Ribot*, Professor in the Collège de France. Authorised translation from the French by *Frances A. Welby*. Chicago: The Open Court Publishing Co. London: Kegan Paul, Trench, Trübner & Co. 1899. Pp. 231. Price, \$1.25 (6s. 6d.).

This is a characteristic production of M. Ribot,—a study of pure psychology, of the genesis and embryogeny of general ideas, rigorously excluding all that relates to logic, the theory of knowledge, and metaphysics. We are thrown, here, he says, "upon observation, upon the facts wherein mental processes are enunciated, and discovered. Our material, and principal sources of information, lie therefore: (1) for inferior abstracts, in the acts of animals, of children, of uneducated deaf-mutes; (2) for intermediate abstracts, in the development of languages, and the ethnographical documents of primitive or half-civilised peoples; (3) for superior abstracts, in the progressive constitution of scientific ideas and theories, and of classifications."

"We shall endeavor," further, "to show how the faculty of abstracting and of generalising has been developed empirically, and to follow it in its spontaneous and natural evolution as shown in history,—not in the philosophical speculations which are only its efflorescence, and which, for the most part, ignore or despise its origins."

In the progressive development of the operations of abstraction and generalisation, he finds three main periods: "(1) inferior abstraction, prior to the appearance of speech, independent of words (though not of all signs); (2) intermediate abstraction, accompanied by words, which though at first accessory, increase in importance little by little; (3) superior abstraction, where words alone exist in consciousness, and correspond to a complete substitution."

We have then passed in rapid and brilliant review the main facts of animal,

child, ethnic, and linguistic psychology, as well as the main outlines of the history of science. The chief interest for philosophical readers will lie in M. Ribot's examination of scientific ideas (the concepts of number, space, time, cause, law, and species), in which will be found a fine critical summary of the best recent speculation on these topics (and the same may be said of the chapters on the lower forms of abstraction and on language). The volume possesses thus, in addition to its incisive and apt scientific criticisms, its lucidity and economy of exposition, a decided value as an epitome of research. It will accordingly rank with M. Ribot's other works in popularity and in the success with which it is destined to disseminate among the public at large, sound and practical psychological ideas. The translation has been excellently done. μ.

A FIRST BOOK IN ORGANIC EVOLUTION. By *D. Kerfoot Shute, A. B., M. D.* Ophthalmic Surgeon to the University Hospital (Columbian), Professor of Anatomy in the Columbian University. Chicago: The Open Court Publishing Co. London: Kegan Paul, Trench, Trübner & Co. 1899. Pp. 285. Illustrations, 30. Colored plates, 9. Price, \$2.00 (7s. 6d.).

Dr. Shute has proposed in this work to write an *introduction* to the Development Theory, only; and the book is designed especially for prospective medical students, and for high schools, academies, and colleges. The style is easy and simple, and great pains have been taken, by means of a very full etymological glossary, to make every technical term clear. The introductory studies on classifications, cellular physiology, heredity, ordinary zoölogy and botany, have been prepared purposely for the needs of the beginner, and nothing technical beyond what is contained in the book is requisite to its comprehension. While the author makes no claim to originality, save in the matter of presentation, commendatory words may still be said as to his method of arranging his material and particularly as to the illustrations and diagrams several of which are new. The colored plates, nine in number, are splendid specimens of the printer's art, and contain in themselves more instruction as to the rôle coloration plays in natural selection than triple the number of pages in print could convey. Having Dr. Shute's book, no one, however slight his knowledge of biology, can now have the remotest pretext for not acquainting himself with the main features of the theory of evolution. μ.

L'ANNÉE BIOLOGIQUE. Comptes rendus annuels des Travaux de Biologie Générale. Publiés sous la Direction de *Yves Delage* Professeur à la Sorbonne, avec la collaboration d'un Comité de Rédacteurs. Secrétaire de la Rédaction *Georges Poirault*, Directeur du Laboratoire d'enseignement supérieur de la villa Thuret, à Antibes. Troisième Année, 1897. Paris: Schleicher Frères. 1899. Pp. 843.

The *Année biologique* keeps on increasing in size; the report upon the vast and swelling bulk of biological inquiry seems to have no end; and it is precisely in

this circumstance that the great value of the *Année* lies. The science of biology in all its extent for the year 1897 is here epitomised and one need have this volume only, to be assured that nothing of importance has escaped one's notice. Too much praise, therefore, cannot be bestowed upon the editors and their collaborators for the performance of their wearisome task; and it is to be hoped that the work will find its way into all working libraries.

The principal modification of the contents for 1897 is the introduction of a new heading "Polymorphism," which is a name for such phenomena as the existence of workers, drones, and queens in colonies of bees. The general captions are: "The Cell," "The Sexual Products and Fecundation," "Parthenogenesis," "Asexual Reproduction," "Ontogenesis," "Teratogenesis," "Correlation," "Death, Immortality," "Morphology," "Heredity," "Variation," "Origin of Species," "Nervous Systems and Mental Functions." μ.

NATURALISM AND AGNOSTICISM. The Gifford Lectures Delivered Before the University of Aberdeen in the Years 1896-1898. By *James Ward*, Sc. D., Hon. LL.D. Edinburgh, Professor of mental Philosophy and Logic in the University of Cambridge. New York: The Macmillan Company. London: Macmillan & Co., Ltd. 1899. 2 vols. Pp. 302, 294.

These lectures will be profitable reading to many students of the philosophy of science, for they come from a psychological writer of distinction, and both afford a tolerable retrospect of scientific history and cast a cheerful horoscope of the future. Mr. Ward seeks to overthrow the purely mechanical conception of the universe, and believes that "an examination of the 'real principles' of Naturalism secures us a specially advantageous position for discussing the epistemological questions on which the justification of idealism depends." As to agnosticism, he remarks: "The unity of experience cannot be replaced by an unknowable that is no better than a gulf between two disparate series of phenomena and epi-phenomena. Once materialism is abandoned and dualism found untenable, a spiritualistic monism remains the one stable position. It is only in terms of mind that we can understand the unity, activity, and regularity that nature presents. In so understanding we see that Nature is Spirit." Further, since naturalism and agnosticism "eventually lead us to spiritualistic monism in spite of themselves, their demurrer to theistic inquiries is not sustained." On the ground that necessary truths are "truths of reason," they are held to originate in the *subject* of experience and not in the object; hence the justification of Mr. Ward's doctrine. But it does not follow that because they originate in the subject, they are not objective in character and validity, nor even non-experiential in origin. This is always the error of the spiritualists, (who, while professing monism, are dualists without knowing it), that they still regard the subjective and the objective as belonging to disparate realms, the one as real the other as unreal, and their modes of operation as essentially distinct. The strictly "scientific," i. e., the mathematico-mechanical, view of the universe

Mr. Ward says can never give us "rational insight, spiritual light, understanding." We do not see why. If Mr. Ward cannot put reason and poetry into it, perhaps others can; much depends upon ourselves and on the *character* of our conviction, in this regard; to us, "the thoughts that often lie too deep for tears" may be conceived to spring far more naturally and spontaneously from nature considered as a law-determined cosmos than from nature conceived as an elusive, obscure, and impenetrable source of sentimentalities. We are in accord with many of the trenchant criticisms that Mr. Ward has made, but we cannot agree with his view of the limitations of scientific research. It would seem that in most instances, he is over-throwing Mr. Spencer's philosophy of science (which forms his main object of attack), not the philosophy of science itself, which is quite a different thing. μρρκ.

THE LOGICAL BASES OF EDUCATION. By *J. Welton, M.A.*, Professor of Education in the Yorkshire College, Victoria University. London: Macmillan and Co., Limited. New York: The Macmillan Company. 1899. Pp. 288. Price, \$1.00.

Mr. Welton is one of those who believe that the solution of all the questions relative to education will be found in the study of modern logic; for logic analyses the processes by which knowledge is reached, and education is the inculcation of knowledge. In like manner, it has been contended that, since man is an animal, all philosophy is merely a branch of biology, as in a farther view it might be of astronomy. The connexion is evident and will not be disputed. But the present book is nevertheless a treatise on elementary logic and not a treatise on education. In the former respect it is good, and will, because of its desire to influence the theory of education, perhaps be better suited to teachers than many another text-book of logic. It has appeared in Macmillan's *Manuals for Teachers* series, and is excellently got up. μ.

AN ETHICAL SUNDAY SCHOOL. A Scheme for the Moral Instruction of the Young. By *Walter L. Sheldon*, Lecturer of the Ethical Society of St. Louis; Author of "An Ethical Movement." London: Swan Sonnenschein and Co., Ltd. New York: The Macmillan Co. 1900. Pp. 206. Price, 3s.

Parents and educators desirous of substituting some more rational and systematic method of religious instruction for the conventional Sunday-school may find a basis for their work in this volume. Mr. Sheldon claims for it the value of *sketch*, and nothing more. It has cost much hard practical work to produce it, and it is the outcome of many disheartening failures. Here are some of its ideas: "It was our intention to reverse the process customary in the average Sunday school, letting the teaching concerning what is commonly known as 'religious conceptions' come in at the end of the course, *beginning* the course of instruction with the elements of morality. It has not been our purpose in any way definitely to antagonise religious beliefs. But instead of beginning our teaching with talks about 'God,'

this latter feature comes in as the last step, with which we close our course of instruction for the young, just before they leave our charge to enter the larger School of Life."

The services are quite varied with more of a leaning to business than in the ordinary school. There are "responsive exercises," musical exercises, recitations, art-studies, picture-talks, æsthetic exercises, story-telling from the Bible, "beautiful thought" studies from the ethical and religious world-literature, etc., etc. In so new and unique an attempt as this, one must naturally refrain from criticism; it is an honest effort in a field where too little work is done to be scoffed at, and if to many, the substitutes for the old forms seem hollow, poor, and fantastical, let them send Mr. Sheldon their own suggestions, which he says will be welcome. μ.

KANT AND SPENCER. A Study of the Fallacies of Agnosticism. By *Dr. Pau. Carus*. Chicago: The Open Court Publishing Co.; London: Kegan Paul, Trench, Trübner & Co. 1900. Pp., 105. Price, 20 cents.

The papers constituting this volume, which forms No. 40 of the Religion of Science Library, are: (1) The Ethics of Kant, (2) Kant on Evolution, (3) Mr. Spencer's Agnosticism, and (4) Mr. Spencer's Comment, with the Author's Reply. In the first two Dr. Carus endeavors to show the baselessness of Mr. Spencer's contention that Kant's ethics is a system of supernatural mysticism, and to do this he makes numerous quotations from Kant's scientific writings which fully establish Kant's claim to be a precursor of Lamarck, Von Baer, and Darwin as an evolutionist. In the last two essays he attacks Mr. Spencer's agnosticism and philosophy generally, taking advantage of the historical and critical questions involved to elucidate certain basic problems of philosophy. The upshot of his position is summarised in the following words:

"I do not say that it is necessary to be a Kantist in any sense; but to be a leader of thought, a leader that leads onward and forward, it is indispensable to understand Kant. Mr. Spencer's attitude toward Kant has remained disdainful and even hostile. This is the more to be regretted as Mr. Spencer possesses many rare accomplishments that would naturally have fitted him to become an apostle of progress. He is regarded so by many of his adherents and enemies, but only by those who are superficially acquainted with philosophical problems. I do not hesitate to say that Mr. Spencer is a reactionary spirit. He seems progressive because he objects to the religious dogmas that have been established by tradition, but he is reactionary because he boldly sets up nescience as a philosophical principle, and the time is near at hand when his very enemies will take refuge in his doctrines.

BIOLOGICAL LECTURES FROM THE MARINE BIOLOGICAL LABORATORY, Wood's Holl, Mass. Boston: Ginn & Co. 1899. Pages, 343. Price, \$2.90.

The lectures of the Wood's Holl Marine Biological Laboratory for 1898 are of more than usual interest, and will go a great way toward the elucidation of some

of the moot problems of biology. The titles and authors of the lectures are as follows: (1) The Structure of Protoplasm, by E. B. Wilson; (2) Cell-Lineage and Ancestral Reminiscence, by E. B. Wilson; (3) Adaptation in Cleavage, by F. R. Lillie; (4) Protoplasmic Movement as a Factor of Differentiation, by E. G. Conklin; (5) Equal and Unequal Cleavage in Annelids, by A. L. Treadwell; (6) The Cell Origin of the Prototoch, by A. D. Mead; (7) Relation of the Axis of the Embryo to the First Cleavage Plane, by C. M. Clapp; (8) Observations on Various Nucleolar Structures of the Cell, by T. H. Montgomery, Jr.; (9) Protoplasmic Contractility and Phosphorescence, by S. Watasé; (10) Some Problems of Regeneration, by T. H. Morgan; (11) The Elimination of the Unfit as Illustrated by the Introduced Sparrow, *Passer Domesticus*, by H. C. Bumpus; (12) On the Heredity of the Marking in Fish Embryos, by Jacques Loeb; (13) Do the Reactions of Lower Animals Due to Injury Indicate Pain-Sensations? by W. W. Norman; (14) North American Ruminant-Like Mammals, by W. B. Scott; (15) Caspar Friedrich Wolff and the *Theoria Generationis*, by W. M. Wheeler; (16) Animal Behavior, by C. O. Whitman.

Professor Loeb's article shows how the *analytic* study of heredity has taken the place of such attempts as Weismann's and Jaeger's to explain it by means of a single theory. He says: "The change in our attitude toward this problem is similar to that which has taken place in psychology. Psychologists no longer try to give a theory of the soul or of consciousness, but try to analyse the various groups of psychical phenomena more or less independently of each other."

His own researches are contradictory especially of the conclusions of Eimer. He remarks: "I am no believer in Weismann's theories of heredity, but it seems to me that the so-called theories of Eimer on the origin of the longitudinal striation in animals are nothing but a play on words. One of his 'general laws' maintains that every marking is at first longitudinal. The truth of the matter is that most animals are not spherical, and that most organs, especially in segmented animals, run in a longitudinal direction through the animal; for instance the spinal cord, vertebral column, blood vessels, intestine, etc."

ON SPINOZISTIC IMMORTALITY. By *George Stuart Fullerton*, Professor of Intellectual and Moral Philosophy in the University of Pennsylvania. Publications of the University of Pennsylvania Series in Philosophy. No. 3. Boston: Ginn & Co. 1899. Pages, 154.

This monograph will be useful to the student of Spinoza. "Spinoza," says Professor Fullerton, "represents a certain way of thinking which properly belongs, I believe, to the past, but of which there are to-day, particularly in England and America numerous survivals. Spinozism has an historical justification; it is an articulated system resting upon a basis which might well have seemed in the seventeenth century, sound and satisfactory. Its very errors are deserving of a certain respect. But conceptions which do not appear out of place upon a back-

ground of seventeenth century thought, are a discordant element in the thought of the nineteenth. They have not the excuse for existence which they once had, and they hold their own, I believe, simply because they are not analysed with sufficient care. If my criticisms will contribute even a little toward turning upon such conceptions a more searching light, I shall be abundantly satisfied."

All of Professor Fullerton's readers will not share his fear of Spinozism, but they will certainly be glad for his analysis of one of the purest and clearest thinkers of history.

EDUCATIONAL LEGISLATION AND ADMINISTRATION OF THE COLONIAL GOVERNMENTS.

By *Elsie W. Clews, Ph. D.* Columbia University Contributions to Philosophy, Psychology, and Education. Vol. 6. Nos. 1-4. New York: The Macmillan Co. 1899. Pp., 524. Price, \$2.00.

"In spite of the emphasis that in recent years has fallen upon the significance of educational history," says Mr. Clews, "the history of American education is as yet unwritten." Hence the justification for the compiling of this bulky book. "In a country of representative government," continues the author, "one of the most fruitful and available means of historical study for the sociologist lies in the tracing out of the development of important social principles through a continuous process of legislation. Single acts of legislation indicate little; but the history of successful and unsuccessful legislation on any given subject cannot fail to point out the course of a society's thought and activity in relation to such subject. In this view I have endeavored, in the present account of the educational legislation of the central governments of the American colonies, to put into available shape the records of that legislative interest in education which was at times the formulation of, and at times the stimulus to, the colonists' educational efforts."

PAGES CHOISIES DES GRANDES ÉCRIVAINS. Lectures Littéraires: (1) Diderot. (2) Guyau. (3) J. J. Rousseau. (4) Cicero. (5) Victor Cousin. Paris: Armand Colin & Cie. Price, 4 francs, bound.

We desire to call attention to this series, from the fact that several of its numbers contain selections from philosophical writers. In the main, the series is literary, and is made up of extracts from such modern authors as Balzac, Chateaubriand, Dumas, Gautier, Lesage, and George Sand, and from several ancients, as Homer and Virgil. But it is to be hoped that in the long run still more of classical, scientific, and philosophical literature will be included, as the plan is excellent in every regard. Each volume is prefaced by a critical and biographical notice from the hands of a competent editor and in some cases by a list of the author's works. The series has more than a merely linguistic and belletristic value, and the selections of the volumes have been well made. μ.